Appendix A

Stakeholders and Advisory Committee Members

List of Stakeholders and Advisory Committee Members

Stakeholder	Organization
David G. Jefle	Corridor business owner
Richard Ochsnol	Corridor business owner
Glen Bumgardner	Corridor resident
Wally Sept	Corridor resident
Elloie Jeter	Florence Civic Club
John C. McGee	Florence-Carlton School District
Gordon Reese	Friends of the Bitterroot Trail
Jean Belangie-Nye	Lolo Community Council
Phil Smith	Missoula City Bike & Pedestrian Program
Greg Robertson	Missoula County
Barbara Evans	Missoula County
Bob Giordono	MIST
Charlie Wright	Montana Department of Commerce
Shame Grimes	Montana Highway Patrol
Mike Kress	MPO – Office of Planning and Grants
Cheryl Russell	University of Montana

Advisory Committee Member	Organization
Bruce Bender, Chief Admin Officer	City of Missoula
Ed Childers, City Council	City of Missoula
Elloie Jeter	Florence Civic Club
David Gjefle	Corridor business owner
Jean Belangie-Nye	Lolo Community Council
Phil Smith, Bike/Pedestrian Coordinator	Missoula City Bike & Pedestrian Program
Greg Robertson, Public Works Dir.	Missoula County
Barbara Evans, CC (Beginning of Study to August 2007)	Missoula County
Larry Anderson, CC (August 2007 to present)	Missoula County
Sheriff Mike McMeekin	Missoula County Sheriff's Department
Capt. Tom Hamilton	Montana Highway Patrol
Ray Kuntz	Montana Motor Carriers Association
Steve Werner	Montana Rail Link
Steve Earle, General Mgr.	Mountain Line
Mike Kress, Sr. Transportation Planner	MPO – Office of Planning and Grants
Lyn Hellegaard, Manager	MR TMA
Karen Hughes, Interim Planning Dir. (Beginning of Study to July 2008)	Ravalli County
Renee Lemon , Interim Planning Dir. (July 2008 to present)	Ravalli County
Greg Chilcott, CC	Ravalli County
Undersheriff Kevin McConnell	Ravalli County Sheriff’s Office
Amber Blake (Beginning of Study to August 2007)	Missoula Office of Planning and Grants
Mirtha Becerra (August 2007 to present)	Missoula Office of Planning and Grants

Appendix B

Newsletters

US93 Corridor Plan

Missoula to Florence

Planning Steps & Schedule

Step #1 Identify issues ◆ Stakeholder interviews ◆ Meet with elected officials	Oct / Dec 2005
Step #2 Assess existing transportation / environmental / land use conditions	Nov 2005 thru Jan 2006
Public Open House #1 Project kickoff—Identify issues, discuss goals	**Feb 2006**
Step #3 Analyze future travel demand and performance	Jan 2006
Step #4 Confirm purpose & need / goals	Feb 2006
Step #5 Develop preliminary improvement options	Mar / Apr 2006
Public Open House #2 Confirm possible improvement options	**Jun 2006**
Step #6 Analyze improvement options	Jun / Jul 2006
Step #7 Identify feasible improvement projects and policies	Jul / Aug 2006
Public Open House #3 Present draft feasible improvements	**Late Summer 2006**
Step #8 Develop draft recommendations	Sept 2006 thru Jan 2007
Public Open House #4 Present draft corridor plan	**Fall 2006**
Step #9 Prepare final corridor plan	Spring 2007

For more information

Sheila Ludlow, MDT Project Manager
(406) 444-9193 / sludlow@mt.gov

Don Galligan, HDR Project Manager
(406) 541-8132 / Donald.Galligan@hdrinc.com

Mike Pepper, KMP Planning - Public Inv.
(208) 734-6208 / kmpplanning@cableone.net

Shane Stack, MDT Engineering Services Supv.
Missoula District
(406) 523-5830 / sstack@mt.gov

MDT Recorded Comment Line
(800) 714-7296

Project Web Site:
www.mdt.mt.gov/pubinvolve/us93corridor/

Project Description and Status

The US 93 Corridor Plan (the Plan) is being conducted by the Montana Department of Transportation to identify the most needed improvements to the US 93 transportation corridor between Missoula and Florence that will meet the corridor's operational requirements and user needs for the next 20 years, given financial constraints. The planning process considers the needs of local residents in Missoula, Lolo and Florence along with other residents in the region and the traveling public.

To date, the planning process has included a review of existing traffic and corridor use, land use and environmental conditions. A series of stakeholder interviews, the first round of public open house events, the first advisory committee meeting, agency and a stakeholder workshops have also been completed. Based on this combined input and information, a list of corridor issues (see back of newsletter) have been identified and the draft corridor goals (see list below) have been established.

Using the public issues, existing conditions, corridor needs and goals as a guide, the consultant team is now developing a list of possible improvement options. These draft possible improvements will be presented at the next public open houses in late May or early June. Watch for the next newsletter and local media for dates, locations and times for these events.

Draft Corridor Goals

Safety: Provide and maintain a safe transportation corridor for all modes of travel

Environment: Minimize through "best practices", the negative corridor impacts to the adjacent environment, communities and wildlife

Financial: Ensure the wise use of financial resources, through financially feasible solutions

Multi-modal: Optimize the use of alternative transportation modes throughout the corridor

Transportation Corridor Design: Implement safe "context-sensitive" design solutions that balance corridor functional needs with the community and environmental character of the corridor

Congestion: Maintain acceptable levels of safe corridor operation

Access: Manage corridor access within the law

MDT serving you with pride

500 copies of this public document were published at an estimated cost of $0.92 per copy, for an approximate total cost of $460, which includes printing and distribution.

HDR ONE COMPANY | Many Solutions

HDR Engineering, Inc.
River Quarry at Park Center
412 E. Park Center, Suite 100
Boise, ID 83706-6659

Some corridor issues we've heard…

SAFETY

- Lack of adequate left turn protection
- Unsafe / illegal parking
- Vehicle / pedestrian conflicts
- Conflicting and improper center lane movements
- Traffic speeds seem too high
- No, or limited US 93 emergency access when blocked

MULTI-MODAL

- Desire to reduce motor vehicle travel demand
- Desire for separated pathway between Lolo and Missoula
- Desire for more alternative transportation modes
- Lack of sufficient multi-modal connections in Missoula
- Van pool schedules do not meet user needs
- Insufficient number / poorly lit Park and Ride lots
- Desire for passenger rail service

ROADWAY DESIGN

- Drainage / flooding / ice across highway at MP 86.2
- Insufficient shoulder / bike lane width
- Dip on Blue Mtn. Rd. at approach to US 93
- Lack of separation between north and southbound lanes
- Sight distance limitation at Trader Bros. intersection
- Insufficient shoulder width for right turn movements
- Bottleneck between Lolo and Missoula
- Difficulty of visibility of pavement markings during rain
- Lack of real-time roadway information for travelers
- Right turn radius is too tight for southbound truck turns onto Mormon Crk Rd.
- Turn bays on and off US 93 at East Side Highway are too short

CAPACITY / LEVEL OF SERVICE

- Backup on US 93 between Lolo and Missoula when closed due to emergencies
- Lack of traffic breaks during peak traffic
- Congestion at Blue Mountain Rd. westbound from US 93
- Traffic stacking is increasing along corridor
- Increased conflicts with commercial traffic
- Insufficient capacity to meet traffic volume needs and maintain acceptable level of service
- Congestion during peak traffic hours

ACCESS

- Too many / close access points
- Conflicting turning movements at Lolo School
- Residential development creates increased demand for access to US 93
- Long delays accessing US 93 during peak times
- Insufficient coordination with land use planning process
- Desire to maintain access control

ENVIRONMENTAL

- Corridor noise through Lolo and Florence
- Deer crossing and congestion near Buckhouse Bridge
- Reduced air quality due to traffic volumes and congestion
- Risks due to use of US 93 as hazardous material route
- Poor aesthetics at southern gateway to Missoula
- Aging population needs for emergency services and mobility
- US 93 impacts to wetlands; bisect and drainage
- Air pollution and impacts to bike and ped use from roadway dirt and winter time sanding
- Excessive noise from rumble strips

"MDT attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information call (406) 541-8132 or TTY (406) 444-7696"

US93 Corridor Plan

Missoula to Florence

Planning Steps & Schedule

Step #1 Identify issues ♦ Stakeholder interviews ♦ Meet with elected officials	Oct / Dec 2005
Step #2 Assess existing transportation / environmental / land use conditions	Nov 2005 thru Jan 2006
Public Open House #1 Project kickoff—Identify issues, discuss	**Feb 2006**
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Step #5 Develop preliminary improvement options	Mar / Apr 2006
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Step #6 Analyze improvement options	Jun / Jul 2006
Step #7 Identify feasible improvement projects and policies	Jul / Aug 2006
Public Open House #3 Present draft feasible improvements	**Late Summer 2006**
Step #8 Develop draft recommendations	Sept 2006 thru Jan 2007
Public Open House #4	**Fall / Winter 2006**
Step #9 Prepare final corridor plan	Winter/Spring

For more information

Sheila Ludlow, MDT Project Manager
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Mike Pepper, KMP Planning - Public Inv.
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Shane Stack, MDT Engineering Services Supv.
Missoula District
(406) 523-5830 / sstack@mt.gov

MDT Recorded Comment Line
(800) 714-7296

Project Web Site:
www.mdt.mt.gov/pubinvolve/us93corridor/

Project Description and Status

The US 93 Corridor Plan (the Plan) is being conducted by the Montana Department of Transportation to identify the most needed improvements to the US 93 transportation corridor between Missoula and Florence that will meet the corridor's operational requirements and user needs for the next 20 years. The planning process considers the needs of local residents in Missoula, Lolo and Florence along with other residents in the region and the traveling public.

To date, the planning process has included a review of existing traffic and corridor use, land use and environmental conditions, future traffic projections and an analysis of socio-economic data and trends to better understand corridor users and potential activities. Corridor goals, which were outlined in Newsletter #1, have been established based on public input and the operational needs of the corridor. These goals, together with the corridor Purpose and Need Statement have been used to guide the identification of possible improvement options, which are shown on the inside of this newsletter. The possible improvement options, together with additional corridor background information will be discussed at the ***upcoming public open house events in June*** (see details below). The public is encouraged to attend one of the workshops to review the possible alternatives and provide comments. For those who cannot attend, a comment form is included inside this newsletter.

You're Invited to

Public Open House #2

"Possible Improvement Options"

Monday, June 12, 2006 - Missoula - 5:00 to 8:00 p.m.*
Quality Inn Conference Center
3803 Brooks St.

Tuesday, June 13, 2006 - Florence - 5:00 to 8:00 p.m.*
Florence-Carlton School
5602 Old US Highway 93

** Both open house events are open house format. Area residents and other interested individuals are invited to drop in anytime between 5:00 p.m. and 8:00 p.m. MDT and project consultants will be on hand to discuss possible improvement options, corridor goals and other project information. Note that all information presented at the open houses, along with comment forms, is available on the project web site (see address at left).*

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500 copies of this public document were published at an estimated cost of $1.25 per copy, for a total cost of $625, which includes printing and distribution.

HDR ONE COMPANY | Many Solutions

HDR Engineering, Inc.
River Quarry at Park Center
412 E. Park Center, Suite 100
Boise, ID 83706-6659

US93 Corridor Plan

Missoula to Florence

You're Invited to

Public Open House #2

To discuss
Possible Improvement Options

Monday, June 12 in Missoula
Tuesday, June 13 in Florence

See inside for details

Draft Corridor Goals

Based on public input and used to guide development of improvement options

Safety: Provide and maintain a safe transportation corridor for all modes of travel

Environment: Minimize through "best practices", the negative corridor impacts to the adjacent environment, communities and wildlife

Financial: Ensure the wise use of financial resources, through financially feasible solutions

Multi-modal: Optimize the use of alternative transportation modes throughout the corridor

Transportation Corridor Design: Implement safe "context-sensitive" design solutions that balance corridor functional needs with the community and environmental character of the corridor

Congestion: Maintain acceptable levels of safe corridor operation

Access: Manage corridor access within the law to balance user access demands with corridor operational needs

"MDT attempts to provide accommodations for any known disability that may interfere with a person participating n any service, program or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information call (406) 541-8132 or TTY (406) 444-7696"

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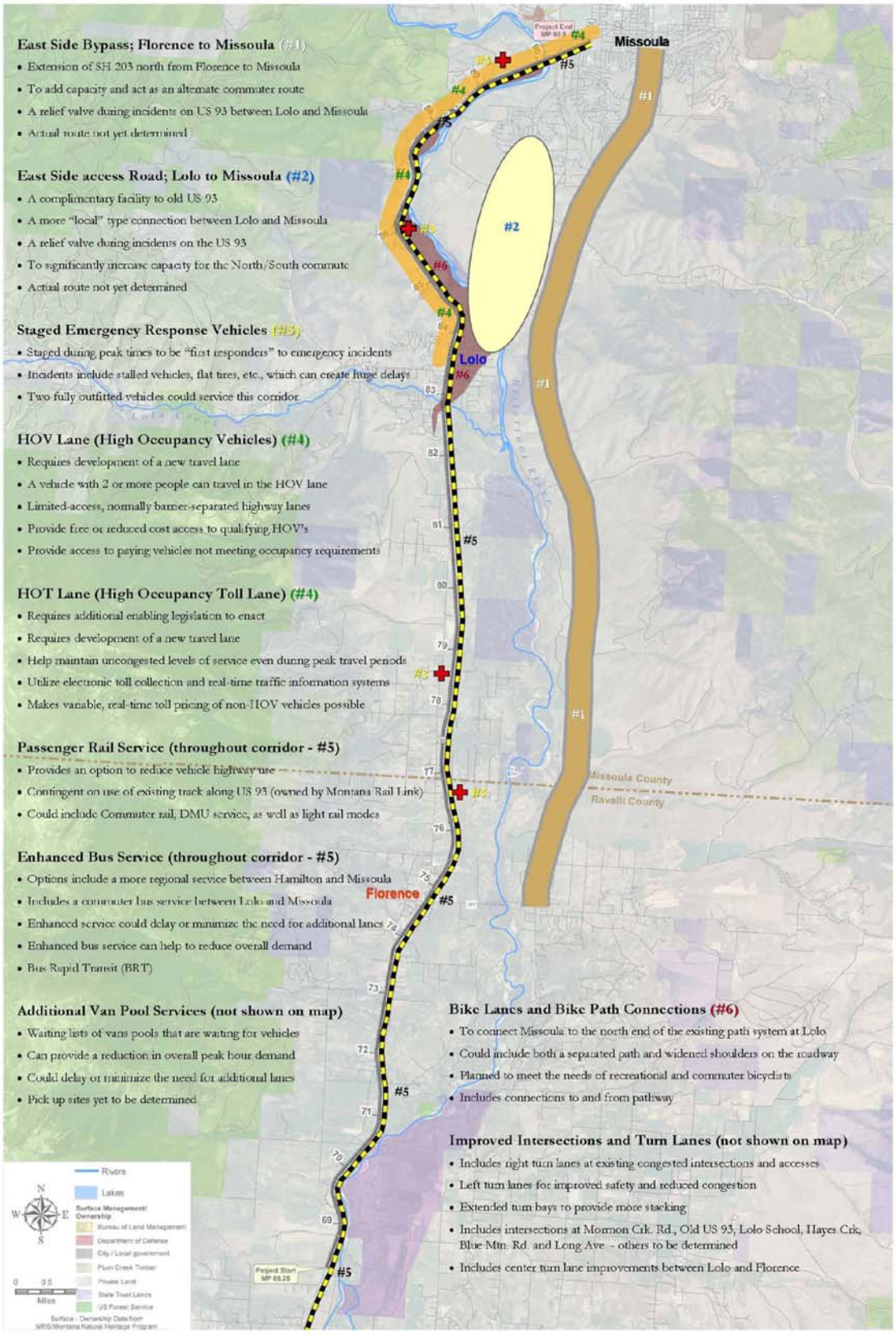
US 93 Corridor: Missoula to Florence
Possible Improvement Options



US 93 Public Meeting
August 15 & 16, 2007

AGENDA

Wednesday, August 15th Lolo School
Thursday, August 16th Missoula Quality Inn

Presentation will begin at 6:30 p.m.

Primary purpose of the meeting:

To confirm draft corridor improvement options
To discuss the screening process that will be used to prioritize improvement options
To discuss and gather comments on the draft policy recommendations

I. Welcome and Introductions

Sheila Ludlow, MDT Project Manager
Shane Stack, MDT Missoula District
Bob Burkhardt, FHWA
Darryl James, HKM Engineering; Consultant Project Manager
Jennifer James, HKM Engineering
Sarah Nicolai, HKM Engineering

II. Project Development Process and Status

III. Improvement Options

IV. Screening Process

Goals:
- Improve Corridor Operation and Design
- Improve Corridor Safety

Objectives:
- Minimize Impacts to the Environment
- Ensure Cost Efficiency and Fundability
- Enhance Multi-Modal Transportation

V. Policy Tools

VI. Comments / Next Steps

MDT attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information call (406) 442-0370 or TTY (406) 444-7696.

US93 Corridor Plan

Missoula to Florence

Planning Steps & Schedule

Step #1 Identify issues ♦ Stakeholder interviews ♦ Meet with elected officials	Oct / Dec 2005
Step #2 Assess existing transportation / environmental / land use conditions	Nov 2005 thru Jan 2006
Public Open House #1 Project kickoff—Identify issues, discuss goals	**Feb 2006**
Step #3 Analyze future travel demand and performance	Jan 2006
Step #4 Draft goals and objectives	Mar / Apr 2006
Step #5 Develop preliminary improvement options	Mar / Apr 2006
Public Open House #2 Introduce possible improvement options	**June 2006**
Temporary Project Break	
Step #6 Analyze improvement options	Summer 2007
Step #7 Identify improvement options for further study	July / Aug 2007
Public Meeting #3 Present improvement options for further study	**Aug 2007**
Step #8 Screen improvement options	Fall 2007
Public Meeting #4 Present screened list of improvement options	**December 2007**
Step #8 Develop draft recommendations	Winter 2008
Public Meeting #5 Present draft corridor plan	**Spring 2008**
Step #9 Finalize corridor plan	Spring 2008

For more information

Sheila Ludlow, MDT Project Manager
(406) 444-9193 / sludlow@mt.gov
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(406) 442-0370 / djames@hkminc.com
Jennifer James, HKM Public Involvement
(208) 442-0370 / jjames@hkminc.com
Shane Stack, MDT Engineering Services Supv.
Missoula District: (406) 523-5830 / sstack@mt.gov
MDT Recorded Comment Line
(800) 714-7296
Project Web Site:
www.mdt.mt.gov/pubinvolve/us93corridor/

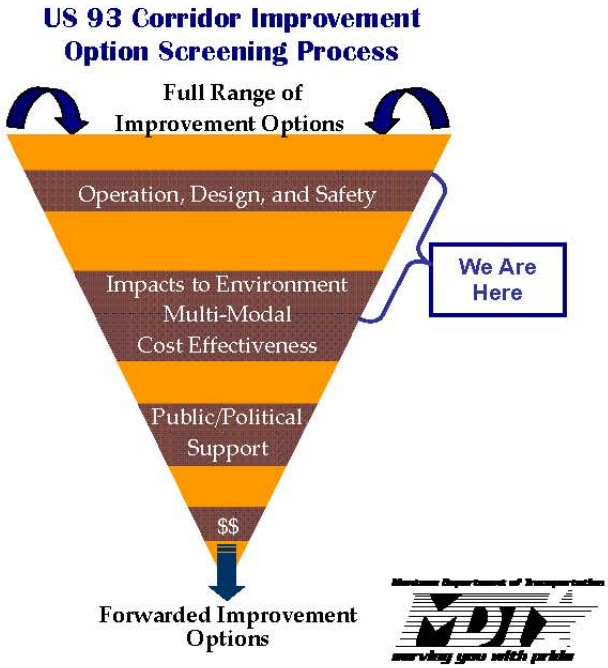
Project Description and Status

The US 93 Corridor Study is being conducted by the Montana Department of Transportation (MDT) to identify the most needed transportation improvements in the US 93 corridor between Missoula and Florence that will meet operational requirements and user needs for the next 20 years. The planning process considers the needs of local residents in Missoula, Lolo, and Florence along with other residents and the traveling public throughout the region.

To date, the planning process has included a review of existing traffic and corridor use, land use and environmental conditions, and socio-economic data and trends. Corridor goals have been drafted based on public input and the operational characteristics of the corridor. The goals have been used to guide the identification of improvement options and as a basis for screening possible improvement options.

Improvement Option Screening Process

The US 93 Corridor Plan Screening Process is being used to prioritize improvement options depending on which one best meets the Goals and Objectives of the project. The following graphic illustrates the process.



US 93 Public Meeting
January 30 and 31, 2008

Project Description

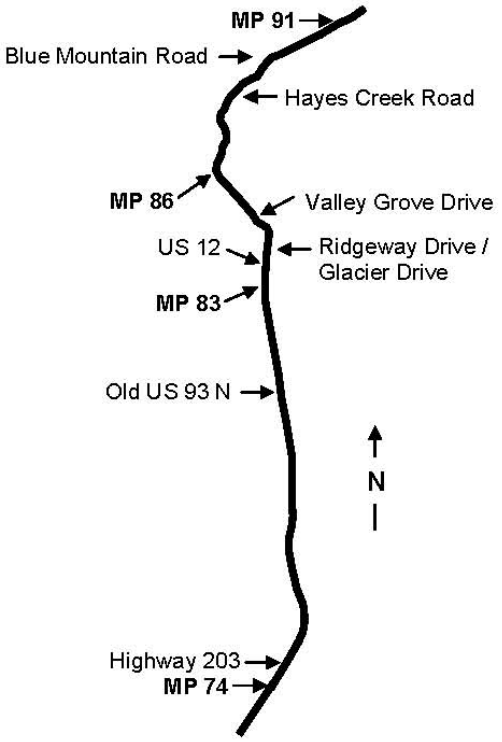
The US 93 Corridor Study is being conducted by the Montana Department of Transportation (MDT) to identify the most needed transportation improvements in the US 93 corridor between Missoula and Florence that will meet operational requirements and user needs for the next 20 years. The planning process considers the needs of local residents in Missoula, Lolo, and Florence along with other residents and the traveling public throughout the region.

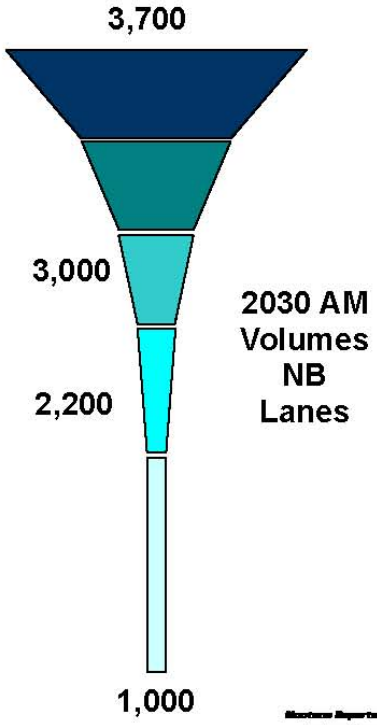
What is the Function of the Corridor?

The main purpose of US 93 is the movement of people and goods. US 93 is functionally classified as a **Principal Arterial**. An arterial provides the highest level of mobility, at the highest speed, for long uninterrupted travel.

What is the Problem in the US 93 Corridor?

- Vehicles can move relatively smoothly through corridor under ideal conditions. Given the high congestion levels, any disruption of flow from an accident, inclement weather, or slow-moving vehicle could create substantial delays.
- It is difficult to access US 93 from side streets, especially at stop-controlled intersections.
- There are projected to be long mainline delays at the intersection of US 93 and Highway 203 and at signalized intersections in Lolo by 2030.





US93 Corridor Plan

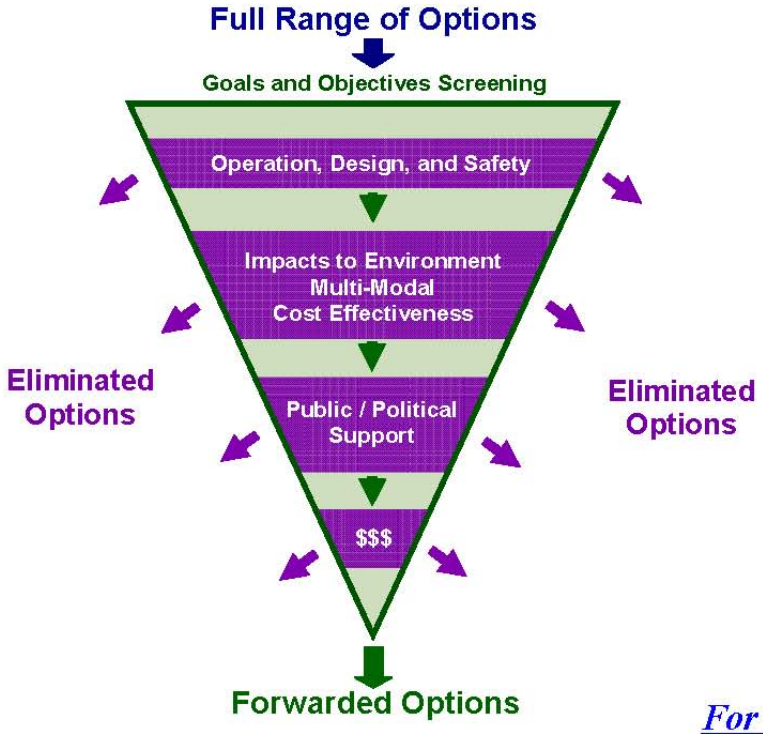
Missoula to Florence

What are Possible Solutions to the Problem?

- Transit Options
- Other Options Enhancing Mode Choice
- Options Adding Vehicular Capacity
- Travel Demand Management (TDM) / Transportation System Management (TSM)
- Spot Improvements
- Policy Tools

Improvement Option Screening Process

The following graphic illustrates the US 93 Corridor Study Improvement Option Screening Process.



Next Steps

We are Here →	**Public Meeting #4**	**January 2008**
	Develop draft recommendations	Winter 2008
	Public Meeting #5	**Spring 2008**
	Finalize corridor plan	Spring 2008

For more information

Sheila Ludlow, MDT Project Manager
(406) 444-9193 / sludlow@mt.gov
Darryl James, HKM Project Manager
(406) 442-0370 / djames@hkminc.com
Jennifer James, HKM Public Involvement
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MDT Recorded Comment Line
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Project Web Site:
www.mdt.mt.gov/pubinvolve/us93corridor/

Appendix C

Letters Received from State and Federal Agencies

COPY to [illegible] + Shultz
PC File

Montana Fish, Wildlife & Parks

RECEIVED
APR 0 5 2006
ENVIRONMENTAL

Region 2 Office
3201 Spurgin Road
Missoula, MT 59804-3101
406-542-5500
April 3, 2006

Jean Riley, Bureau Chief
Environmental Service Bureau
MT Department of Transportation
PO Box 201001
Helena, MT 59620-1001

MASTER FILE COPY

Dear Ms. Riley:

Reference: US 93 Corridor Plan, Missoula to Florence--Preliminary thoughts

We have looked at the general map and the aerial photo for this project located in Region 2 of Montana Fish, Wildlife & Parks (MFWP). We offer these initial comments on some preliminary fish and wildlife issues we identified for this project's location.

Fisheries Issues

Highway 93 currently has two stream crossings that have inadequate passage facilities for fish and aquatic organisms:

1. Hayes Creek crossing (section 10, just south of Missoula). This is a perennial, high quality cutthroat trout stream in reaches upstream of the highway and above the private land parcels just upstream of the highway. The Highway 93 crossing is a steep, grossly undersized culvert that is considered a complete fish passage barrier.

2. Carlton Creek crossing (section 2, just north of Florence). This is a large tributary drainage that is intermittent in the highway crossing reach. The Highway 93 crossing is an undersized box culvert with a bottom composed of natural substrates. The crossing is likely a barrier at high flows to fish and a more frequent barrier to other aquatic organisms.

Wildlife Issues

1. Missoula to Lolo Segment. Development from Missoula to the Blue Mountain Road area has pretty well eliminated wildlife habitat. From Hayes Creek to Worden Creek

development is relatively less, distance from hillsides to Bitterroot River is less, and the ability for wildlife to get from the west to east side of the river is greater. The hillsides and river bottom provide winter range for white-tailed deer, and there is lots of elk use on the hillsides above the highway. In other words there is some potential for future wildlife linkage in that area. At the same time it is our impression that both black bears and white-tailed deer get hit in this area at a pretty high rate. If reconstructed, consideration should be given to providing for wildlife crossings in this area.

2. Lolo to Florence Segment. Potential linkage for grizzly bear, lynx, mountain lion and wolf occurs just south of Lolo where the Bitterroot Valley narrows for about 2-5 miles. We have evidence that all those species have been along the Bitterroot River bottom. The north end of the Bitterroot Valley is the one most likely place to provide linkage because the valley is constricted and development is relatively sparse there. In addition two major landowners in that area are very interested in applying conservation easements to their ranches. It is not until south of Hamilton before we find similar conditions that foster linkage for those species between the Bitterroot and Sapphire Mountain Ranges.

Park & Recreation Issues

1. Fishing Access Sites. There are several parcels of MFWP land along this highway corridor that are designated Fishing Access (FAS) Sites. Currently, vehicles drive off of the highway to access these sites. This is potentially creating an unsafe condition. It would be important that access to these parcels be maintained and a safer design implemented to enhance or improve that vehicle access.

2. Trails. With the existence of the great, nonmotorized trail system running from Lolo to Florence, the public and trail advocate groups are requesting to see the trail linked and extended northward from Lolo to Missoula. Whatever could be done to make this happen would be critical in meeting that demand for trails and recreation, according to the Statewide Comprehensive Outdoor Recreation Plan.

We thank you for providing the opportunity for MFWP to comment on this project, and we look forward to working with you.

(Please contact Sharon Rose at 542-5540 or shrose@mt.gov if you wish to receive an electronic version of these comments.)

Sincerely,

Mack Long
Regional Supervisor

ML/sr

Appendix D

Map of Lolo Area
Land Uses

LOLO REGIONAL PLAN: OVERVIEW

County Resolution 2002-064 April 24, 2002

Office of Planning & Grants

LOCATOR MAP

PURPOSE:
The land use map is visual representation of the goals and policies articulated throughout the Lolo Regional Plan. It is not a zoning map. The designations on the map are approximate. Site-specific conditions are taken into consideration when evaluating proposals and adopting regulations. The narrative in the Land Use Rationale section of the plan provides the underlying principles for the land use designations in particular areas.

- Plan Boundary
- Development Area Boundary
- Light Industrial and Commercial
- Light Industrial
- General Commercial
- Community Commercial
- Public and Quasi-public Lands and Facilities
- 16 dwelling units per acre
- 6 dwelling units per acre
- 4 dwelling units per acre
- 2 dwelling units per acre
- Community Crossroads
- Suggested Community Crossroads Commercial Node
- 1 dwelling unit per acre
- 1 dwelling unit per 5 acres
- 1 dwelling unit per 10 acres
- Parks and Open Space
- Open and Resource
- Floodway
- Area of Significant Flood Risk
- 6 Density if connected to public sewer system.

Areas of Special Value:

1. Traveler's Rest
2. Scenic Value
3. Gateways

N

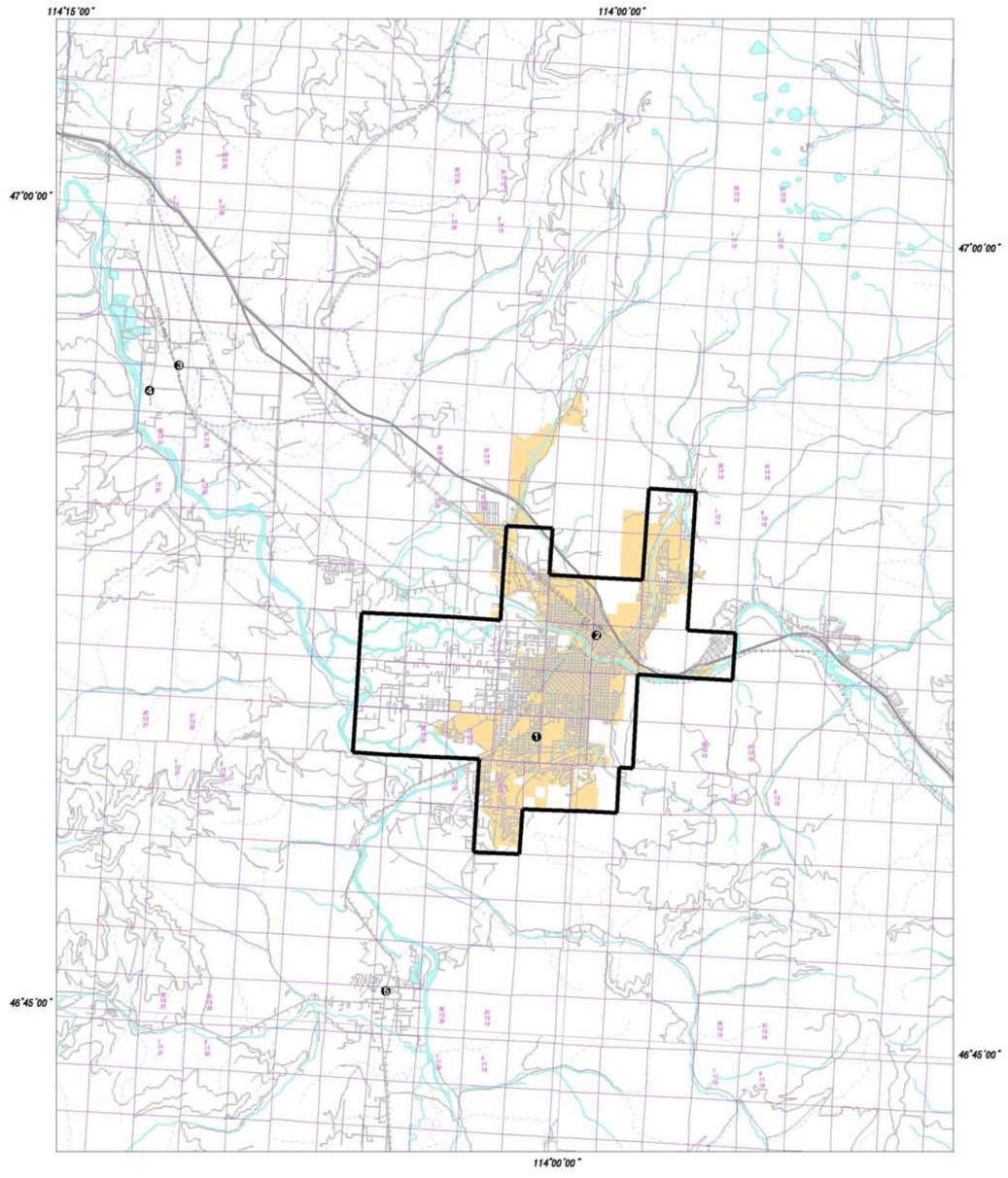
Scale: 1 inch = 6000 feet
0 6000 12,000
Contour interval 160 Feet.

Source: Missoula County Surveyors, County Carrying Capacity Study, USGS, and Office of Planning & Grants. July 17, 2002

Filename: PLOLOGNL.PLT

Appendix E

Non-Attainment Areas



MISSOULA COUNTY

Missoula PM-10 Nonattainment Area

MISSOULA PM-10 Nonattainment Area:*
T13N, R19W; Sections 2, 8, 11, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 27, 28, 29, 30, 31, 32, 33 and 34;
T12N, R19W; Sections 4, 5, 6, 7;
T13N, R20W; Sections 23, 24, 25, 26, 35 and 36.

* Boundary as described by 56 FR 56794, November 6, 1991.

❶ Boyd Park PM-10 SLAMS monitoring site. TEOM sampler with Years of Record 1994 to present. AIRS number 30-63-0024, UTM location Zone 11, 727245mE; 5191741mN.

❷ Health Department PM-10 SLAMS monitoring site. HIVOL sampler with Years of Record 1986 to present. AIRS number 30-63-0031, UTM location Zone 12, 271750mE; 5195400mN.

❸ Stone #1A PM-10 SLAMS monitoring site. HIVOL sampler with Years of Record 1992 to present. AIRS number 30-63-0034, UTM location Zone 11, 719000mE; 5203200mN.

❹ Stone #2 PM-10 SLAMS monitoring site. HIVOL sampler with Years of Record 1992 to present. AIRS number 30-63-0016, UTM location Zone 11, 712804mE; 5202351mN.

❺ Lolo Area PM-10 SLAMS monitoring site. HIVOL sampler with Years of Record 1997 to present. AIRS number 30-63-0035, UTM location Zone 11, 722900mE; 5182510mN.

LEGEND

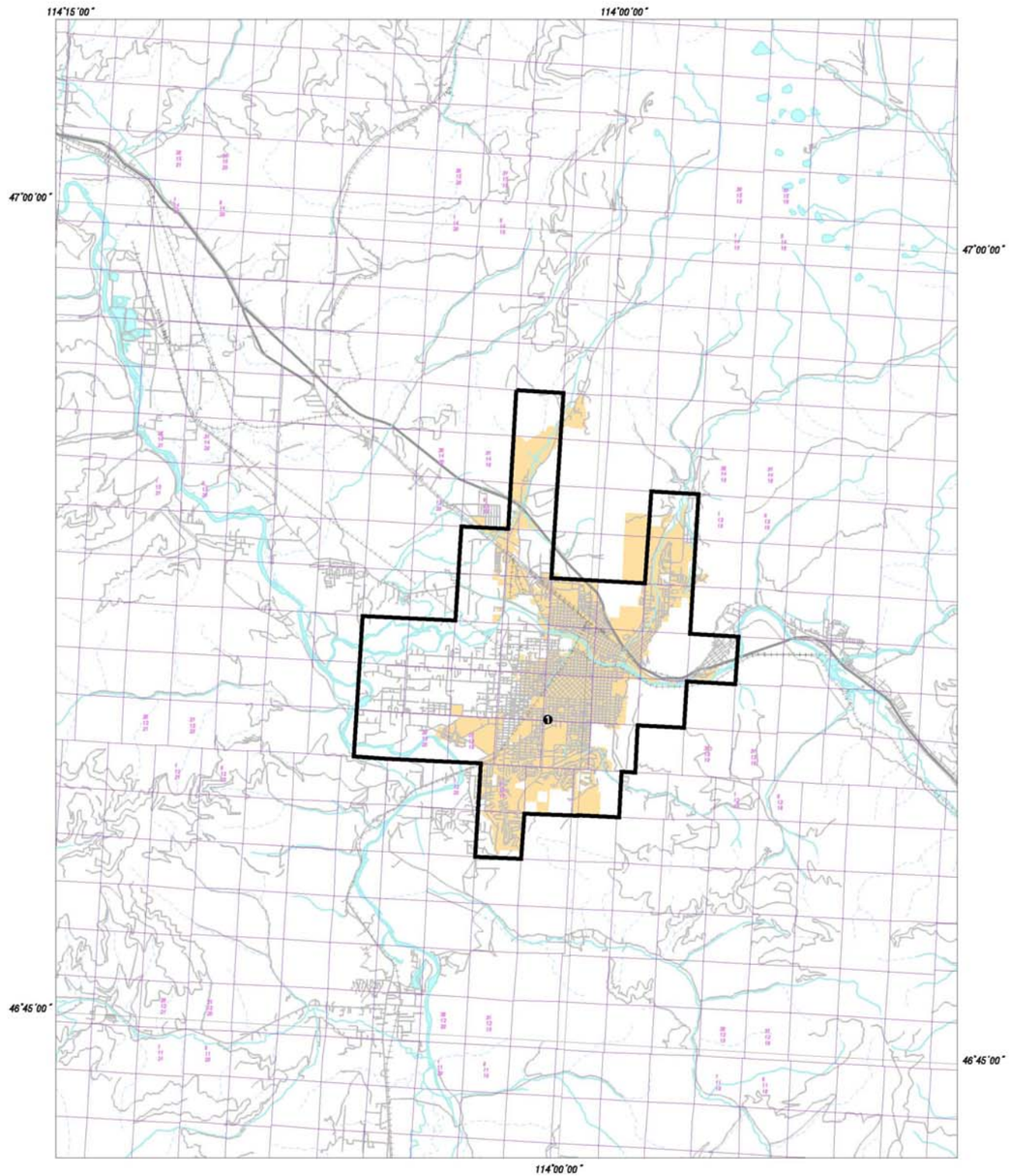
- Designated PM-10 Nonattainment Area Boundary
- Improved Road
- Interstate Highway
- Trail
- Railroad
- River
- Stream
- Public Land Survey
- Municipal Area
- Water Body

Background data from TIGER files and BLM PLSS or UTM grid generated in ArcInfo.

0 1 2 3 4
Scale of Miles
0 1 2 3 4
Scale of Kilometers

N

Montana State Library
Natural Resource Information System
Map #98NRIS248-ae - 08/28/98



MISSOULA COUNTY

Missoula CO Attainment Area Subject to Maintenance Plan

MISSOULA CO Nonattainment Area: *
Missoula and vicinity including the following (Township and Range) sections:
T14N, R19W Sections 29 and 32; T13N, R19W Sections 2, 5, 7, 8, 11, 14 through 24 and 26 through 34;
T12N, R20W Sections 4 through 7;
T13N, R20W Sections 23 through 26, 35 and 36.

* Boundary as described by 56 FR 56790, November 6, 1991.

❶ Malfunction Junction CO SLAMS monitoring site.
Years of Record 1979 to present.
AIRS number 30-063-0005, UTM location Zone 11, 727500mE; 5192500mN.

LEGEND

- Designated CO Nonattainment Area Boundary
- Improved Road
- Interstate Highway
- Trail
- Railroad
- River
- Stream
- Public Land Survey
- Municipal Area
- Water Body

Background data from TIGER files and BLM PLSS or UTM grid generated in ArcInfo.

0 1 2 3 4
Scale of Miles
0 1 2 3 4
Scale of Kilometers

N

Montana State Library
Natural Resource Information System
Map #NRIS248-ac - 08/28/98

Appendix F

Access Control Report Recommendations

ACCESS CONTROL PLAN

NH 0002(506), CN 4776 US 93 NAS LOLO TO MISSOULA

* From the Institute of Traffic Engineers (ITE) Trip Generation Manual - 7th Edition, where applicable.
** Assumed legal assistance or access agreement

Access locations are subject to engineering feasibility review and design.

Parcel ID	RP (MP)	Side	Access Type	ITE Land Use Code *	Quantity	Unit *	Estimated Traffic Volume* (Trips per Day)	Parcel Address	Access Classification	Recommendation	Comments
N/A	93.43	LT	Public	---	---	---	---	US 12	Developed	Open	Paved approach with signal
1-1	93.41	RT	Commercial	945 Gas Station w/convenience w/ Car Wash	12.0	Positions	1934	11600 US HIGHWAY 93 59847	Developed	Open	Access to gas station
1-1	93.43	RT	Commercial	945 Gas Station w/convenience w/ Car Wash	12.0	Positions	1934	11600 US HIGHWAY 93 59847	Developed	Open	Access to gas station
1-1	93.47	RT	Commercial	---	---	---	---	11600 US HIGHWAY 93 59847	Developed	Close	Multiple access with access via Lewis & Clark Dr
1-2	93.43	LT	Commercial	932 High-Turnover Restaurant	5.6	KSF	838	11605 HWY 93 SOU LOLO 59847	Developed	Open	Access to adjacent property (1-3) parking **
1-3	93.44	LT	Commercial	---	---	---	---	11605 HWY 93 SOU LOLO 59847	Developed	Close	Access via approach for Property 1-2 **
1-3	93.45	LT	Commercial	---	---	---	---	11605 HWY 93 SOU LOLO 59847	Developed	Close	Access via approach for Property 1-4 **
1-4	93.46	LT	Commercial	932 High-Turnover Restaurant 837 Karate	5.0 3.6	KSF KSF	838	11675 HWY 93 SOU LOLO 59847	Developed	Open	Access to karate shop & parking for Property 1-3 **
1-5	93.48	LT	Commercial	---	---	---	---	11693 US HWY 93 59847	Developed	Close	Access via Lewis & Clark Dr
N/A	93.50	LT	Public	---	---	---	---	Lewis and Clark Dr	Developed	Open	Paved approach with stop sign
N/A	93.51	RT	Public	---	---	---	---	Lewis and Clark Dr	Developed	Open	Paved approach with stop sign
1-6	93.52	LT	Commercial	---	---	---	---	11725 US HIGHWAY 93 59847	Developed	Close	Access via Lewis & Clark Dr
1-7	93.53	RT	Commercial	---	---	---	---	11700 LEWIS & CLARK DR 59847	Developed	Close	Access via Lewis & Clark Dr
1-8	93.54	LT	Residential	240 Mobile Home Park	15.0	DU	75	US HIGHWAY 93 59847	Developed	Open	Access to mobile home park
1-9	93.55	RT	Field	---	---	---	---	US HIGHWAY 93 LOLO 59847	Developed	Close	Multiple accesses
1-9	93.59	RT	Field	---	---	---	---	US HIGHWAY 93 LOLO 59847	Developed	Close	Multiple accesses
1-9	93.58	RT	Field	---	---	---	< 30	US HIGHWAY 93 LOLO 59847	Developed	Open	Access to field
1-10	93.54	LT	Commercial	942 Automobile Care Center	1.0	KSF	10	11705 US HIGHWAY 93 59847	Developed	Open	Access to auto shop
1-10	93.55	LT	Commercial	---	---	---	---	11705 US HIGHWAY 93 59847	Developed	Close	Multiple accesses
1-11	93.57	LT	Commercial	---	---	---	---	US HIGHWAY 93 LOLO 59847	Developed	Close	Multiple accesses
1-11	93.59	LT	Commercial	943 Automobile Parts Sales	1.0	KSF	62	US HIGHWAY 93 LOLO 59847	Developed	Open	Access to equipment repair shop
1-12	93.60	LT	Commercial	814 Specialty Retail Center	0.2	KSF	6	US HIGHWAY 93 59847	Developed	Open	Access to print shop
1-13	93.61	RT	Field	---	---	---	---	101 AVA'S LN 59847	Developed	No Direct Access	Access via Ava's Lane
N/A	93.58	RT	Public	---	---	---	---	Axis Ln	Developed	Open	Paved approach with stop sign
1-14	93.61	LT	Commercial	---	---	---	---	11625 US HIGHWAY 93 59847	Developed	Close	Multiple access with access via new shared access
1-14	93.66	LT	Commercial	710 Office 941 Quick Lubrication Vehicle Shop	2.0 3.0	KSF Stalls/Positions	102	11625 US HIGHWAY 93 59847	Developed	Open	New shared access with Property 1-15
1-15	93.65	LT	Commercial	---	---	---	---	11595 US HIGHWAY 93 59847	Developed	Close	Access via new shared access with Property 1-14
1-16,1-17	93.69	RT	Field	---	---	---	---	152 AVA'S LN 59847	Developed	Close	Access via Ava's Lake South
			Field	---	---	---	---	197 AVA'S LN 59847			Access via Ava's Lake North
1-18	93.69	LT	Commercial	---	---	---	< 30	US HIGHWAY 93 59847	Developed	Open	Access to utility station
1-19	93.71	LT	Commercial	---	---	---	---	US HIGHWAY 93 LOLO 59847	Developed	No Direct Access	Access via approach for Property 1-21 **
N/A	93.71	RT	Public	---	---	---	---	Axis Ln	Developed	Open	Paved approach with stop sign
1-20	93.72	RT	Commercial	---	---	---	< 30	US HIGHWAY 93 LOLO 59847	Developed	Open	Access to future development
1-21	93.76	LT	Commercial	722 Mobile School	503.0	Stalls/ds	618	US HIGHWAY 93 59847	Developed	Open	Access to school and Property 1-19
1-22	93.77	RT	Commercial	833 Fast Food Restaurant	0.5	KSF	208	11430 US HIGHWAY 93 59847	Developed	Open	Access to ice cream shop
1-22	93.79	RT	Commercial	---	---	---	---	11430 US HIGHWAY 93 59847	Developed	Close	Multiple access with access via Tyler Way
1-23	93.75	LT	Commercial	---	---	---	---	US HIGHWAY 93 59847	Developed	Close	Multiple access with access via new access
1-23	93.79	LT	Commercial	520 Elementary School	503.0	Stalls/ds	645	US HIGHWAY 93 59847	Developed	Open	Access to school
1-23	93.83	LT	Commercial	520 Elementary School	503.0	Stalls/ds	645	US HIGHWAY 93 59847	Developed	Raise	Recommended right-in, right-out access to school
N/A	93.76	RT	Public	---	---	---	---	Tyler Way	Developed	Open	Paved approach with signal
1-24	93.81	RT	Commercial	---	---	---	---	US HIGHWAY 93 59847	Developed	No Direct Access	Access via Tyler Way
1-25	93.84	RT	Commercial	---	---	---	---	11350 US HIGHWAY 93 59847	Developed	No Direct Access	Access through shopping center **
1-26	93.85	RT	Commercial	820 Shopping Center	93.0	KSF	2167	LOLO SHOPPING CTR 59847	Developed	Open	Access to shopping center and Properties 1-25 and 1-26 **
1-27	93.89	LT	Commercial	310 Hotel	80.0	Rooms	468	11225 US HIGHWAY 93 59847	Developed	Open	Access to hotel
1-28	93.89	RT	Commercial	---	---	---	---	LOLO SHOPPING CTR 59847	Developed	No Direct Access	Access through shopping center **
1-29	93.93	LT	Commercial	---	---	---	< 30	US HIGHWAY 93 59847	Developed	Open	Access to parking
1-29	93.98	LT	Commercial	---	---	---	---	US HIGHWAY 93 59847	Developed	Close	Multiple access
1-30	93.98	RT	Commercial	932 High-Turnover Restaurant	5.0	KSF	838	11130 US HIGHWAY 93 59847	Developed	Open	Access to restaurants and bank **
1-31	93.93	LT	Commercial	---	---	---	---	US HIGHWAY 93 59847	Developed	Close	Access via Ridgeway Dr
N/A	93.95	RT	Public	---	---	---	---	Glacier Drive	Developed	Open	Paved approach with signal
N/A	93.95	LT	Public	---	---	---	---	Ridgeway Drive	Developed	Open	Paved approach with signal
1-32	93.99	RT	Commercial	---	---	---	---	130 GLACIER DR 59847	Developed	Close	Access via Glacier Dr and new shared access with Property 1-33
1-32,1-33	93.99	RT	Commercial	720 Medical/Dental Office	2.0	KSF	72	130 GLACIER DR 59847	Developed	Raise	Shared access to business
			Commercial	912 Drive-In Bank	3.0	KSF	738	US HIGHWAY 93 59847			Shared access to bank
1-33	94.03	RT	Commercial	---	---	---	---	US HIGHWAY 93 59847	Developed	Close	Access via new shared access with Property 1-32
1-34,1-35	94.01	LT	Commercial	945 Gas Station w/convenience w/ Car Wash	12.0	Positions	1934	US HIGHWAY 93 59847	Developed	Open	Access to gas station
			Residential	210 Single Family Detached Housing	1.0	DU	10	10930 US HIGHWAY 93 59847			Access to residence
1-35	94.03	LT	Commercial	---	---	---	---	10915 US HIGHWAY 93 59847	Developed	Close	Access via new shared access with Property 1-36
1-36,1-37	94.05	RT	Commercial	912 Drive-In Bank	3.0	KSF	738	US HIGHWAY 93 59847	Developed	Open	Access to bank
			Commercial	814 Specialty Retail Center	0.5	KSF	32	10933 US HIGHWAY 93 59847			Access to shopping center
1-38,1-39	94.07	LT	Commercial	---	---	---	< 30	10915 US HIGHWAY 93 59847	Developed	Raise	Access to spec lot
			Commercial	---	---	---	< 30	US HIGHWAY 93 59847			Access to spec lot
1-39	94.09	LT	Commercial	---	---	---	---	US HIGHWAY 93 59847	Developed	Close	Access via new shared access with Property 1-38
1-39	94.11	LT	Residential	210 Single Family Detached Housing	1.0	DU	10	10905 US HWY 93 59847	Developed	Open	Future emergency access only
1-27, 1-40	94.37	RT	Field	---	---	---	< 30	10333 US HIGHWAY 93 59847	Undeveloped	Open	Access to field
			Field	---	---	---	< 30	NONE			Access to field
1-41	94.03	LT	Residential	---	---	---	---	NONE	Undeveloped	No Direct Access	Access via Ridgeway Drive
1-42,1-44	94.05	RT	Residential	---	---	---	---	10250 US HWY 93 59847	Undeveloped	Close	Access via new shared access across from Valley Grove Drive
			Residential	---	---	---	---	9906 US HWY 93 59847			Access via new shared access across from Valley Grove Drive
1-43,1-44	94.09	RT	Residential	210 Single Family Detached Housing	1.0	DU	10	10250 US HWY 93 59847	Undeveloped	Raise	Access to residence

ACCESS CONTROL PLAN

NH 0002(906), CN 4776 US 93 N&S LOLO TO MISSOULA

* From the Institute of Traffic Engineers (ITE) Trip Generation Manual - 7th Edition, where applicable.
** Area need legal easement or access agreement

Access locations are subject to engineering feasibility review and design.

Parcel ID	RP (MP)	Side	Access Type	ITE Land Use Code *	Quantity	Unit *	Estimated Traffic Volume* (Trips per Day)	Parcel Address	Access Classification	Recommendation	Comments
[illegible]	[illegible]	[illegible]	Residential	210 Single Family Detached Housing	2.0	DU	19	9999 US HWY 93 59847	[illegible]	[illegible]	Access to residence
1-43	84.83	LT	Commercial	---	---	---	---	10225 US HIGHWAY 93 59847	Intermediate	No Direct Access	Access via Valley Grove Drive
N/A	84.83	LT	Public	---	---	---	---	Valley Grove Dr	Intermediate	Open	Paved approach with stop sign
1-45	84.85	LT	Commercial	---	---	---	---	US HIGHWAY 93 59847	Intermediate	No Direct Access	Access via Valley Grove Drive
1-46	84.87	LT	Commercial	---	---	---	---	9925 US HIGHWAY 93 59847	Intermediate	No Direct Access	Access via Valley Grove Drive through Property 1-45 **
1-47	85.02	LT	Field	---	---	---	---	NONE	Intermediate	No Direct Access	Specific access control and design to be determined
1-48	85.07	LT	Field	---	---	---	---	NONE	Intermediate	No Direct Access	Specific access control and design to be determined
1-49,1-50	85.38	LT	Residential	210 Single Family Detached Housing	1.0	DU	10	NONE	Intermediate	Open	Specific access control and design to be determined
			Residential	210 Single Family Detached Housing	1.0	DU	10	9825 BROWN 59847			Specific access control and design to be determined
1-51	85.38	RT	Field	---	---	---	---	NONE	Intermediate	Close	Multiple access to field
1-51	85.45	RT	Field	---	---	---	< 10	NONE	Intermediate	Open	Access to field
1-52	85.48	LT	Field	---	---	---	---	9825 BROWN 59847	Intermediate	No Direct Access	Specific access control and design to be determined
N/A	85.60	LT	Public	---	---	---	---	83rd Lane	Intermediate	Close	Duplicate intersection approach
N/A	85.62	LT	Public	---	---	---	---	83rd Lane	Intermediate	Open	Recommended right in, right out access/Paved approach with stop sign
1-53	85.63	LT	Residential	---	---	---	---	9825 BROWN 59847	Intermediate	No Direct Access	Specific access control and design to be determined
1-54	85.63	LT	Residential	---	---	---	---	8900 83RD LN 59847	Intermediate	No Direct Access	Access via 83rd Lane
1-55	85.69	LT	Residential	---	---	---	---	8850 83RD LN 59847	Intermediate	No Direct Access	Access via 83rd Lane
1-56	85.73	LT	Residential	---	---	---	---	8900 83RD LN 59847	Intermediate	No Direct Access	Access via 83rd Lane
1-57	85.79	LT	Residential	---	---	---	---	8850 83RD LN 59847	Intermediate	No Direct Access	Access via 83rd Lane
1-58	85.83	LT	Residential	---	---	---	---	8900 83RD LN 59847	Intermediate	No Direct Access	Access via 83rd Lane
1-59	85.88	LT	Residential	---	---	---	---	8900 83RD LN 59847	Intermediate	No Direct Access	Access via 83rd Lane
1-60, 1-60A	86.69	LT	Residential	---	---	---	---	BITTERROOT RD 59847	Rural	Close	New access via 83rd Lane
			Residential	---	---	---	---	BITTERROOT RD 59847			New access via 83rd Lane
1-61	86.82	RT	Field	---	---	---	---	NONE	Rural	No Direct Access	Other side of railroad
1-62, 1-63	88.25	LT	Field	---	---	---	< 10	NONE	Rural	Open	Access to conservation area
			Field	---	---	---	< 10	NONE			Access to conservation area
1-64	88.83	LT	Field	---	---	---	---	NONE	Rural	No Direct Access	Access to conservation area
1-65	87.60	LT	Field	---	---	---	---	NONE	Rural	No Direct Access	Access via Property 1-66 (same owner) **
1-66	87.62	LT	Field	---	---	---	---	NONE	Rural	No Direct Access	Access to conservation area
1-67	87.63	RT	Field	---	---	---	< 10	NONE	Rural	Open	Access is gated & low - Specific access control and design to be determined
N/A	87.63	RT	Field	---	---	---	---	NONE	Rural	Close	Abandoned sign ration - Specific access control and design to be determined
N/A	87.59	LT	Public	---	---	---	---	Codfish Drive	Rural	Open	Paved approach with stop sign - Specific access control and design to be determined
N/A	87.62	RT	Field	---	---	---	---	NONE	Rural	Close	Abandoned sign ration - Specific access control and design to be determined
N/A	87.65	RT	Field	---	---	---	---	NONE	Rural	Close	Informal pull-out
1-68	87.73	LT	Residential	---	---	---	---	7123 US HIGHWAY 93 59801	Rural	No Direct Access	Access via Codfish Drive
1-69	87.73	LT	Residential	---	---	---	---	7200 COCHISE DR 59801	Rural	No Direct Access	Access via Codfish Drive
1-70	87.78	LT	Residential	---	---	---	---	7200 COCHISE DR 59801	Rural	No Direct Access	Access via Codfish Drive
1-71	87.85	LT	Residential	---	---	---	---	7200 COCHISE DR 59801	Rural	No Direct Access	Access via Codfish Drive
1-72	87.85	RT	Field	---	---	---	---	NONE	Rural	No Direct Access	Other side of railroad
1-73	87.87	LT	Residential	---	---	---	---	COCHISE DR 59801	Rural	No Direct Access	Access via Codfish Drive
1-74	87.91	LT	Residential	---	---	---	---	NONE	Rural	No Direct Access	Access via Codfish Drive
1-75	87.13	LT	Residential	---	---	---	---	BITTERROOT RD 59806	Intermediate	Close	Access via new service road to Property 1-76
1-76	87.11	RT	Field	---	---	---	< 10	US HIGHWAY 93 59801	Intermediate	Open	Access to field
1-77	87.16	LT	Residential	---	---	---	---	7356 BITTERROOT RD 59806	Intermediate	Close	Access via new service road to Property 1-76
1-78	87.17	LT	Commercial	840 Automobile Parts Sales 210 Single Family Detached Housing	0.0 1.0	KSF DU	11	7351 BITTERROOT RD 59806	Intermediate	Open	Access to residences with new service road
1-79	87.18	RT	Commercial	710 General Office Building	2.0	KSF	22	9100 US HIGHWAY 93 59806	Intermediate	Open	Access to business center
1-80	87.19	LT	Residential	---	---	---	---	9205 BITTERROOT RD 59806	Intermediate	Close	Access via new service road to Property 1-76
N/A	87.88	LT	Public	---	---	---	---	Hayes Creek Road	Intermediate	Open	Paved approach with stop sign
1-82	87.85	RT	Residential	---	---	---	---	8303 US HIGHWAY 93 59801	Intermediate	Close	Multiple access with poor sight distance
1-82	87.87	RT	Residential	---	---	---	---	8303 US HIGHWAY 93 59801	Intermediate	Close	Multiple access with poor sight distance
1-82	87.93	RT	Residential	240 Mobile Home Park	15.0	DU	11	8303 US HIGHWAY 93 59801	Intermediate	Open	Access to mobile home park
1-83	87.99	LT	Residential	---	---	---	---	6300 HAYES CREEK RD 59834	Intermediate	Close	Access via Hayes Creek Road
1-84	87.92	RT	Commercial	151 Mini Warehouse	5.0	KSF	13	9903 US HIGHWAY 93 59801	Intermediate	Open	Access to storage facility
1-85	87.85	LT	Residential	---	---	---	---	6300 HAYES CREEK RD 59834	Intermediate	No Direct Access	Access via Hayes Creek Road
1-86, 1-87	87.69	LT	Field	---	---	---	< 10	NONE	Intermediate	New	Access to field
			Residential	210 Single Family Detached Housing	1.0	DU	10	9070 US HWY 93 59834			Access to residence
1-87	87.69	LT	Residential	---	---	---	---	9070 US HWY 93 59834	Intermediate	Close	Access via new shared access with Property 1-86
1-88, 1-89, 1-90, 1-91	87.68	RT	Commercial	110 General Light Industrial	2.0	KSF	14	9303 HWY 93 S 59804	Intermediate	Open	Access to business
			Commercial	710 General Office Building	2.0	KSF	22	9303 HWY 93 S 59804			Access to business center
			Commercial	630 Clinic	2.0	KSF	60	9900 US HWY 93 59830			Access to vet clinic
			Commercial	840 Automobile Parts & Service	3.0	KSF	40	9900 US HWY 93 59830			Access to business
1-92, 1-93	88.03	LT	Commercial Employee	813 Lighting Retail Store 210 Single Family Detached Housing	0.0 1	KSF DU	23	9825 US HIGHWAY 93 59804	Intermediate	Open	Access to gift shop
			Residential	210 Single Family Detached Housing	1.0	DU	10	8719 BITTERROOT RD 59834			Access to residence
1-93	88.03	RT	Commercial	---	---	---	---	9900 US HWY 93 59830	Intermediate	Close	Access via new shared access with Property 1-94
1-93, 1-94	88.05	RT	Commercial	840 Automobile Parts & Service	3.0	KSF	40	9900 US HWY 93 59830	Intermediate	New	Access to business
			Commercial	890 Furniture Store	0.0	KSF	23	9903 US HIGHWAY 93 59804			Access to business
1-95	88.09	RT	Commercial	---	---	---	---	9903 US HIGHWAY 93 59804	Intermediate	Close	Access via new shared access with Property 1-93
1-95	88.07	LT	Commercial	591 Lodge/Fraternal Organization	250.0	Members	13	9765 US HIGHWAY 93 59804	Intermediate	Open	Access to lodge
1-95	88.12	LT	Commercial	---	---	---	---	9765 US HIGHWAY 93 59804	Intermediate	Close	Multiple access
1-94, 1-96	88.09	RT	Commercial	890 Furniture Store	0.0	KSF	23	9903 US HIGHWAY 93 59804	Intermediate	Open	Access to business
			Residential	210 Single Family Detached Housing	1.0	DU	10	9810 US HWY 93 59801			Access to residence
1-97	88.13	RT	Residential	210 Single Family Detached Housing	1.0	DU	10	9803 US HIGHWAY 93 59804	Intermediate	Open	Access to residence

Project ID: [illegible]
Designation: US 93 – LOLO to Missoula
Missoula County, Montana

ACCESS CONTROL PLAN
NH 0002(506), CN 4776 US 93 NAS LOLO TO MISSOULA

* From the Institute of Traffic Engineers (ITE) Trip Generation Manual - 7th Edition, where applicable
** Assumed legal access(es) or access expansion

Access locations are subject to engineering feasibility review and design

Parcel ID	RP (MP)	Side	Access Type	ITE Land Use Code *	Quantity	Unit *	Estimated Traffic Volume* (Trips per Day)	Parcel Address	Access Classification	Recommendation	Comments
1-96, 1-98, 1-100, 1-101	88.19	LT.	Residential	210 Single Family Detached Housing	1.0	DU	10	5125 US HIGHWAY 93 59804	Intermediate	Open	Access to residence **
			Residential	210 Single Family Detached Housing	1.0	DU	10	5165 US HIGHWAY 93 59804			Access to residence **
			Residential	210 Single Family Detached Housing	1.0	DU	10	5205 US HIGHWAY 93 59804			Access to residence **
			Residential	210 Single Family Detached Housing	1.0	DU	10	5668 US HIGHWAY 93 59804			Access to residence **
1-96, 1-98, 1-100,1-101	88.23	LT.	Residential	210 Single Family Detached Housing	1.0	DU	10	5125 US HIGHWAY 93 59804	Intermediate	Open	Access to residence **
			Residential	210 Single Family Detached Housing	1.0	DU	10	5165 US HIGHWAY 93 59804			Access to residence **
			Residential	210 Single Family Detached Housing	1.0	DU	10	5205 US HIGHWAY 93 59804			Access to residence **
			Residential	210 Single Family Detached Housing	1.0	DU	10	5668 US HIGHWAY 93 59804			Access to residence **
N/A	88.05	LT.	Public	---	---	---	---	Wornath Road	Intermediate	Open	Paved approach with stop sign
1-102	88.35	RT.	Field	---	---	---	---	NONE	Intermediate	No Direct Access	Other side of railroad
1-103	88.39	LT.	Field	---	---	---	---	NONE	Intermediate	No Direct Access	Access through Property 1-105 to Wornath Road **
1-104	88.35	RT.	Field	---	---	---	---	NONE	Intermediate	No Direct Access	Other side of railroad
1-105	88.25	LT.	Residential	---	---	---	---	NONE	Intermediate	No Direct Access	Access via Wornath Road
1-106	88.59	LT.	Residential	---	---	---	---	5300 WORNATH RD 59804	Intermediate	No Direct Access	Access via Wornath Road
1-107	88.69	LT.	Commercial	843 Automobile Parts Sales	1.0	KSF	82	5275 HIGHWAY 93 59804	Intermediate	Open	Access to business
1-108	88.67	LT.	Commercial	814 Specialty Retail Center	1.0	KSF	44	5115 US HIGHWAY 93 59804	Intermediate	Open	Access to business
1-109	88.69	LT.	Commercial	110 General Light Industrial	2.0	KSF	16	5165 US HIGHWAY 93 59804	Intermediate	Open	Access to business
1-110	88.75	LT.	Commercial	151 Mini Warehouse	0.3	KSF	13	5185 US HIGHWAY 93 59804	Intermediate	Open	New shared access with Property 1-111
1-111	88.77	LT.	Commercial	---	---	---	---	US HIGHWAY 93 59804	Intermediate	Close	Access via new shared access with Property 1-110
1-112, 1-113, 1-114	88.62	LT.	Commercial	710 General Office Building	2.0	KSF	22	US HIGHWAY 93 59804	Intermediate	Open	Access to business
			Commercial	110 General Light Industrial	2.0	KSF	16	5055 HIGHWAY 93 59804			Access to business
			Commercial	110 General Light Industrial	2.0	KSF	16	5055 HIGHWAY 93 59804			Access to business
1-112, 1-113, 1-114, 1-117, 1-118, 1-119	88.16	RT.	Field	---	---	---	< 10	NONE	Intermediate	Open	Recommended rights-, right-out access
			Residential	210 Single Family Detached Housing	1.0	DU	10	5280 HIGHWAY 93 SO 59804			Recommended rights-, right-out access
			Residential	210 Single Family Detached Housing	1.0	DU	10	5190 HIGHWAY 93 SO 59804			Recommended rights-, right-out access
			Commercial	890 Furniture Store	0.3	KSF	40	5123 HIGHWAY 93 SOUTH 59834			Recommended rights-, right-out access
			Commercial	---	---	---	< 10	5070 US HIGHWAY 93 59804			Recommended rights-, right-out access
			Commercial	843 Automobile Parts & Service	3.0	KSF	48	5000 US HIGHWAY 93 59804			Recommended rights-, right-out access
N/A	88.03	LT.	Public	---	---	---	---	Blue Mountain Road	Intermediate	Open	Paved approach with signal
1-112, 1-113, 1-114, 1-117, 1-118,1-119	88.02	RT.	Field	---	---	---	---	NONE	Intermediate	Open	Access to field
			Residential	210 Single Family Detached Housing	1.0	DU	10	5280 HIGHWAY 93 SO 59804			Access to residence
			Residential	210 Single Family Detached Housing	1.0	DU	10	5190 HIGHWAY 93 SO 59804			Access to residence
			Commercial	890 Furniture Store	0.3	KSF	40	5123 HIGHWAY 93 SOUTH 59834			Access to business
			Commercial	---	---	---	---	5070 US HIGHWAY 93 59804			Access to business
			Commercial	843 Automobile Parts & Service	3.0	KSF	48	5000 US HIGHWAY 93 59804			Access to business
1-120	88.00	LT.	Commercial	---	---	---	---	5030 BLUE MTN RD 59804	Intermediate	No Direct Access	Access via Blue Mountain Road
1-121	88.04	LT.	Commercial	---	---	---	---	NONE	Intermediate	No Direct Access	Access via Blue Mountain Road
1-122	88.10	LT.	Field	---	---	---	< 10	US HIGHWAY 93 59804	Intermediate	Open	Access for ditch maintenance
1-124, 1-125	88.17	RT.	Commercial	942 Automobile Care Center	1.0	KSF	10	4573 HIGHWAY 93 59804	Intermediate	Open	Access to business
			Commercial	942 Automobile Care Center	1.0	KSF	10	4573 HIGHWAY 93 59804			Access to business
1-122, 1-126, 1-127, 1-128, 1-129	88.19	LT.	Commercial	---	---	---	< 10	US HIGHWAY 93 59804	Intermediate	New	Recommended rights-, right-out shared access
			Commercial	---	---	---	< 10	4805 US HIGHWAY 93 59804			Recommended rights-, right-out shared access
			Residential	210 Single Family Detached Housing	1.0	DU	10	4805 US HIGHWAY 93 59804			Recommended rights-, right-out shared access
			Commercial	942 Automobile Care Center	1.0	KSF	10	4425 BITTERROOT RD 59804			Recommended rights-, right-out shared access
			Residential	210 Single Family Detached Housing	1.0	DU	10	4425 BITTERROOT RD 59804			Recommended rights-, right-out shared access
1-126, 1-127, 1-128, 1-129	88.23	LT.	Commercial	---	---	---	---	4805 US HIGHWAY 93 59804	Intermediate	Close	Access via new access
			Residential	---	---	---	---	4805 US HIGHWAY 93 59804			Access via new access
			Commercial	---	---	---	---	4425 BITTERROOT RD 59804			Access via new access
			Residential	---	---	---	---	4425 BITTERROOT RD 59804			Access via new access
1-130	88.28	RT.	Residential	210 Single Family Detached Housing	1.0	DU	10	4705 US HIGHWAY 93 59804	Intermediate	Open	Access to residence - Specific access control and design to be determined
1-131	88.27	LT.	Commercial	---	---	---	< 10	US HIGHWAY 93 59804	Intermediate	Open	Access to gravel pit - Specific access control and design to be determined
1-133	88.65	RT.	Field	---	---	---	---		Intermediate	No Direct Access	Other side of railroad
1-132, 1-134	88.70	LT.	Field	---	---	---	---	US HIGHWAY 93 59804	Intermediate	New	Shared access to Main - Specific access control and design to be determined
1-134	88.83	LT.	Commercial	---	---	---	---	US HIGHWAY 93 59804	Intermediate	Close	Access via new shared access - Specific access control and design to be determined
1-134	88.86	LT.	Field	---	---	---	---	NONE	Intermediate	Close	Access via new shared access - Specific access control and design to be determined
1-135, 1-136	88.87	RT.	Commercial	---	---	---	< 10	US HIGHWAY 93 59804	Intermediate	Open	Access to gravel pit - Specific access control and design to be determined
			Residential	210 Single Family Detached Housing	1.0	DU	10	US HIGHWAY 93 59804			Access to residence - Specific access control and design to be determined
1-137	88.27	LT.	Commercial	151 Mini Warehouse	10.0	KSF	25	US HIGHWAY 93 59804	Intermediate	Open	Access to storage facility
1-138	88.39	LT.	Commercial	---	---	---	---	3850 CLOVERWAY 59804	Intermediate	No Direct Access	Access via Old Highway 93
1-139	88.28	RT.	Residential	210 Single Family Detached Housing	20.0	DU	191	US HIGHWAY 93 59847	Intermediate	Open	Access to residences
1-139	88.83	RT.	Residential	210 Single Family Detached Housing	20.0	DU	191	US HIGHWAY 93 59847	Intermediate	Open	Access to residences
1-140	88.28	LT.	Commercial	140 Manufacturing	3.0	KSF	6	US HIGHWAY 93 59847	Intermediate	Open	Access to business
1-141	88.33	LT.	Residential	240 Mobile Home Park	8.0	DU	60	US HIGHWAY 93 59847	Intermediate	Open	Access to residences
1-142	88.34	LT.	Commercial	944 Gas Station with Convenience Market with Car Wash	12.0	Pos/Sink	1938	US HIGHWAY 93 59847	Intermediate	Open	Access to gas station
1-142	88.36	LT.	Commercial	---	---	---	---	US HIGHWAY 93 59847	Intermediate	Close	Multiple accesses with access via US 12
1-143	88.38	RT.	Commercial	---	---	---	< 10	US HIGHWAY 93 59847	Intermediate	Open	Access to future MDT weigh station

Appendix G

Detailed Costs and Cost Derivations

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Two New Travel Lanes on U.S. 93 from Lolo to Missoula

Item	Quantity	Units		Cost/Unit #	Cost
1. Embankment in place	140400	C.Y.	$	7.41	1,040,364
2. Pl. Mix Bit Surf.	25440	TON	$	26.28	668,563
3. Asphalt Cement	1524	TON	$	337.87	514,914
4. Cr. Agg. Crse	93864	C.Y.	$	17.32	1,625,724
5. Cover	93866	S.Y.	$	0.55	51,626
6. Seed/Fert.	12	Acres	$	400.00	4,800
7. Culvert Ext.	1	L.S.	$	180,000.00	180,000
8. Signing/Striping	1	L.S.	$	75,000.00	75,000
9. Topsoil salvage & place	5000	C.Y.	$	3.51	17,550
10. Fencing & Misc.*	1	L.S.	$	500,000.00	500,000
11. Retaining Wall (see separate itemized estimate for this item)	1	Ea.	$	20,931,559.00	20,931,559
12. Reconstruction of Existing Lanes	5 lanes over 6 mi	per lane per mile	$	1,000,000.00	30,000,000
Subtotal					55,610,101
Traffic Control (15%)					8,341,515
Subtotal					63,951,616
Mobilization (10%)					6,395,162
Subtotal					70,346,778
Contingency (15%)					10,552,017
Subtotal					80,898,794
Construction Engineering (10%)					8,089,879
Design Engineering (20%)					16,179,759
Right-of-Way (29 acres @ 5000/acre)					145,000
Total Estimated Cost					105,313,432

Unit costs based on MDT English Average Bid Prices - 2007
* Misc. items include survey, erosion control, mail boxes, cattle guards, etc.

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Two New HOV Lanes on U.S. 93 from Lolo to Missoula

Item	Quantity	Units		Cost/Unit #	Cost
1. Embankment in place	140400	C.Y.	$	7.41	1,040,364
2. Pl. Mix Bit Surf.	25440	TON	$	26.28	668,563
3. Asphalt Cement	1524	TON	$	337.87	514,914
4. Cr. Agg. Crse	93864	C.Y.	$	17.32	1,625,724
5. Cover	93866	S.Y.	$	0.55	51,626
6. Seed/Fert.	12	Acres	$	400.00	4,800
7. Culvert Ext.	1	L.S.	$	180,000.00	180,000
8. Signing/Striping	1	L.S.	$	125,000.00	125,000
9. Topsoil salvage & place	5000	C.Y.	$	3.51	17,550
10. Fencing and Misc.*	1	L.S.	$	500,000.00	500,000
11. Retaining Wall (see separate itemized estimate for this item)	1	Ea.	$	20,931,559.00	20,931,559
12. Reconstruction of Existing Lanes	5 lanes over 6 mi	per lane per mile	$	1,000,000.00	30,000,000
Subtotal					55,660,101
Traffic Control (15%)					8,349,015
Subtotal					64,009,116
Mobilization (10%)					6,400,912
Subtotal					70,410,028
Contingency (15%)					10,561,504
Subtotal					80,971,532
Construction Engineering (10%)					8,097,153
Design Engineering (20%)					16,194,306
Right-of-Way (29 acres @ 5000/acre)					145,000
Total Estimated Cost					105,407,991

Unit costs based on MDT English Average Bid Prices - 2007
* Misc. items include survey, erosion control, mail boxes, cattle guards, etc.

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Elevated Expressway with Two New Lanes from Lolo to Missoula

Item	Quantity	Units		Cost/Unit #	Cost
1. Elevated Roadway including ramps	909,440	FT^2	$	135.00	122,774,400
2. Signing/Striping	1	LS	$	90,000.00	90,000
3. Reconstruction of Existing Lanes	5 lanes over 6 mi	per lane per mile	$	1,000,000.00	30,000,000
Subtotal					152,864,400
Traffic Control (15%)					22,929,660
Subtotal					175,794,060
Mobilization (18%)					31,642,931
Subtotal					207,436,991
Contingency (15%)					31,115,549
Subtotal					238,552,539
Construction Engineering (15%)					35,782,881
Design Engineering (20%)					47,710,508
Right-of-Way (5 acres @ 5000/acre)					25,000
Total Estimated Cost					322,070,928

Unit costs based on Industry Standard in Montana & MDT English Avg. Bid Prices 2007
* Costs do not include lighting

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Two New Lanes and Center Reversible HOV Lane from Lolo to Missoula

Item	Quantity	Units		Cost/Unit #	Cost
1. Embankment in place	140400	C.Y.	$	7.41	1,040,364
2. Pl. Mix Bit Surf.	25440	TON	$	26.28	668,563
3. Asphalt Cement	1524	TON	$	337.87	514,914
4. Cr. Agg. Crse	93864	C.Y.	$	17.32	1,625,724
5. Cover	93866	S.Y.	$	0.55	51,626
6. Seed/Fert.	12	Acres	$	400.00	4,800
7. Culvert Ext.	1	L.S.	$	180,000.00	180,000
8. Signing/Striping	1	L.S.	$	150,000.00	150,000
9. Topsoil salvage & place	5000	C.Y.	$	3.51	17,550
10. Concrete Barrier Rail (10' section)	6340	Ea.	$	550.00	3,487,000
11. Grade Separated Interchange - Full (3 ea.) (see separate itemized estimate for this item)	1	Ea.	$	6,623,343.00	6,623,343
12. Fencing and Misc.*	1	L.S.	$	500,000.00	500,000
13. Retaining Wall (see separate itemized estimate for this item)	1	Ea.	$	20,931,559.00	20,931,559
14. Reconstruction of Existing Lanes	5 lanes over 6 mi	per lane per mile	$	1,000,000.00	30,000,000
Subtotal					65,795,444
Traffic Control (15%)					9,869,317
Subtotal					75,664,760
Mobilization (10%)					7,566,476
Subtotal					83,231,236
Contingency (15%)					12,484,685
Subtotal					95,715,922
Construction Engineering (10%)					9,571,592
Design Engineering (20%)					19,143,184
Right-of-Way (29 acres @ 5000/acre)					145,000
Total Estimated Cost					124,575,699

Unit costs based on MDT English Average Bid Prices - 2007, 2006, 2005
* Misc. items include survey, erosion control, mail boxes, cattle guards, etc.

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Center Reversible HOV Lanes with new lane from Lolo to Missoula

Item	Quantity	Units		Cost/Unit #	Cost
1. Embankment in place	70200	C.Y.	$	7.41	520,182
2. Pl. Mix Bit Surf.	12720	TON	$	26.28	334,282
3. Asphalt Cement	762	TON	$	337.87	257,457
4. Cr. Agg. Crse	46932	C.Y.	$	17.32	812,862
5. Cover	46933	S.Y.	$	0.55	25,813
6. Seed/Fert.	6	Acres	$	400.00	2,400
7. Culvert Ext.	1	L.S.	$	100,000.00	100,000
8. Signing/Striping	1	L.S.	$	150,000.00	150,000
9. Topsoil salvage & place	2500	C.Y.	$	3.51	8,775
10. Concrete Barrier Rail	6340	Ea.	$	550.00	3,487,000
11. Grade Separated Interchange-Full (3 ea.) (see separate itemized estimate for this item)	1	Ea.	$	6,623,343.00	6,623,343
12. Fencing & Misc.**	1	L.S.	$	600,000.00	600,000
13. Retaining Wall (see separate itemized estimate for this item)	1	Ea.	$	20,931,559.00	20,931,559
14. Reconstruction of Existing Lanes	5 lanes over 6 mi	per lane per mile	$	1,000,000.00	30,000,000
Subtotal					63,853,673
Traffic Control (15%)					9,578,051
Subtotal					73,431,724
Mobilization (10%)					7,343,172
Subtotal					80,774,896
Contingency (15%)					12,116,234
Subtotal					92,891,131
Construction Engineering (10%)					9,289,113
Design Engineering (20%)					18,578,226
Right-of-Way (215 acres @ 5000/acre)					1,075,000
Total Estimated Cost					121,833,470

Unit costs based on MDT English Average Bid Prices - 2007
* Costs do not include lighting
** Misc. items include survey, erosion control, mail boxes, cattle guards, etc.

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Center Reversible Lanes with New Lane from Lolo to Missoula

Item	Quantity	Units		Cost/Unit #	Cost
1. Embankment in place	70200	C.Y.	$	7.41	520,182
2. Pl. Mix Bit Surf.	12720	TON	$	26.28	334,282
3. Asphalt Cement	762	TON	$	337.87	257,457
4. Cr. Agg. Crse	46932	C.Y.	$	17.32	812,862
5. Cover	46933	S.Y.	$	0.55	25,813
6. Seed/Fert.	6	Acres	$	400.00	2,400
7. Culvert Ext.	1	L.S.	$	100,000.00	100,000
8. Signing/Striping	1	L.S.	$	150,000.00	150,000
9. Topsoil salvage & place	2500	C.Y.	$	3.51	8,775
10. Concrete Barrier Rail (10' section)	6340	Ea.	$	550.00	3,487,000
11. Grade Separated Interchange - Full (3 ea.) (see separate itemized estimate for this item)	1	Ea.	$	6,623,343.00	6,623,343
12. Fencing & Misc.*	1	L.S.	$	600,000.00	600,000
13. Retaining Wall (see separate itemized estimate for this item)	1	Ea.	$	20,931,559.00	20,931,559
14. Reconstruction of Existing Lanes	5 lanes over 6 mi	per lane per mile	$	1,000,000.00	30,000,000
Subtotal					63,853,673
Traffic Control (15%)					9,578,051
Subtotal					73,431,724
Mobilization (10%)					7,343,172
Subtotal					80,774,896
Contingency (15%)					12,116,234
Subtotal					92,891,131
Construction Engineering (10%)					9,289,113
Design Engineering (20%)					18,578,226
Right-of-Way (215 acres @ 5000/acre)					1,075,000
Total Estimated Cost					121,833,470

Unit costs based on MDT English Average Bid Prices - 2007, 2006, 2005
* Costs do not include lighting
* Misc. items include survey, erosion control, mail boxes, cattle guards, etc.

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Eastside Bypass from Florence to Missoula - 2 Lanes

Item	Quantity	Units		Cost/Unit #	Cost
1. Unclassified Excavation	468000	C.Y.	$	3.52	1,647,360
2. Pl. Mix Bit Surf.-Gr. S	84800	TON	$	26.28	2,228,544
3. Asphalt Cement - PG 58-28	5080	TON	$	337.87	1,716,380
4. Cr. Agg. Crse	312880	C.Y.	$	17.32	5,419,082
5. Topsoil S&P	100000	C.Y.	$	3.51	351,000
6. Cover	1200000	S.Y.	$	0.55	660,000
7. Seed/Fert.	240	Acres	$	400.00	96,000
8. Signing/Striping	1	L.S.	$	250,000.00	250,000
9. Culverts/Drainage	1	L.S.	$	1,275,000.00	1,275,000
10. Fencing & Misc.**	1	L.S.	$	850,000.00	850,000
Subtotal					14,493,365
Traffic Control (15%)					2,174,005
Subtotal					16,667,370
Mobilization (10%)					1,666,737
Subtotal					18,334,107
Contingency (15%)					2,750,116
Subtotal					21,084,223
Construction Engineering (10%)					2,108,422
Design Engineering (20%)					4,216,845
Right-of-Way (236 acres @ 5000/acre)					1,180,000
Total Estimated Cost					28,589,490

Unit costs based on MDT English Average Bid Prices - 2007, 2006, 2005
* Costs do not include lighting
** Misc. items include survey, erosion control, mail boxes, cattle guards, etc.

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Eastside Access Roadway from Lolo to Missoula - 2 Lanes

Item	Quantity	Units	Cost/Unit #	Cost
1. Unclassified Excavation	187200	C.Y.	$ 3.52	658,944
2. Pl. Mix Bit Surf.-Gr. S	33920	TON	$ 26.28	891,417.60
3. Asphalt Cement - PG 58-28	2032	TON	$ 337.87	686,552
4. Cr. Agg. Crse	125152	C.Y.	$ 17.32	2,167,633
5. Topsoil S&P	40000	C.Y.	$ 3.51	140,400
6. Cover	480000	S.Y.	$ 0.55	264,000
7. Seed/Fert.	96	Acres	$ 400.00	38,400
8. Signing/Striping	1	L.S.	$ 100,000.00	100,000
9. Culverts/Drainage	1	L.S.	$ 510,000.00	510,000
10. Fencing & Misc.*	1	L.S.	$ 500,000.00	500,000
Subtotal				5,957,346
Traffic Control (15%)				893,602
Subtotal				6,850,948
Mobilization (10%)				685,095
Subtotal				7,536,043
Contingency (15%)				1,130,406
Subtotal				8,666,449
Construction Engineering (10%)				866,645
Design Engineering (20%)				173,329
Right-of-Way (94.4 acres @ 5000/acre)				472,000
Total Estimated Cost				10,178,423

Unit costs based on MDT English Average Bid Prices - 2007, 2006, 2005
* Costs do not include lighting
** Misc. items include survey, erosion control, mail boxes, cattle guards, etc.

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Improved Park & Ride Facilities (Sheltered Waiting Area & Racks)

Item	Quantity	Units	Cost/Unit #	Cost
1. Covered Pedestrian Shelter	1	L.S.	$ 55,000	$ 55,000
2. Bicycle Racks	3	Ea.	$ 450	$ 1,350
3. Landscaping/Sprinklers	1	L.S.	$ 8,000	$ 8,000
4. Lighting/Signing	1	L.S.	$ 8,500	$ 8,500
5. Connection Path(s)	1	L.S.	$ 5,000	$ 5,000
6. Bike Lockers	15	Lockers	$ 1,000	$ 15,000
Subtotal				$ 92,850
Mobilization (15%)				$ 13,927
Subtotal				$ 106,777
Contingency (15%)				$ 16,016
Subtotal				$ 122,793
Construction Engineering (10%)				$ 12,279
Design Engineering (12%)				$ 14,735
Right-of-Way				$ -
Total Estimated Cost				$ 150,000

* includes excavation & removal, revegetation, fencing & sign removal, and traffic control

cost data from website www.bicycling info.org/bikecost sponsored by NCHRP and others.

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Bike Lanes on US 93 from Florence to Missoula

Item	Quantity	Units	Cost/Unit #	Cost
1. Embankment in place	166222	C.Y.	$ 7.41	1,231,705
2. Pl. Mix Bit Surf.	8789	TON	$ 26.28	230,975
3. Asphalt Cement	527	TON	$ 337.87	178,057
4. Cr. Agg. Crse	15504	C.Y.	$ 17.32	268,529
5. Drainage/Culvert Extension	1	L.S.	$ 50,000.00	50,000
Subtotal				1,959,267
Traffic Control (15%)				293,890
Subtotal				2,253,157
Mobilization (15%)				337,974
Subtotal				2,591,130
Contingency (15%)				388,670
Subtotal				2,979,800
Construction Engineering (10%)				297,980
Design Engineering (20%)				595,960
Right-of-Way (Permits Only)				10,000
Total Estimated Cost				3,883,740

Unit costs based on MDT English Average Bid Prices - 2007
* Assume 5' wide paths with 11/2" Pl. Mix + 4" CAC

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Separated Bike Path/Pedestrian Path on West Side from Lolo to Missoula and on East Side from Florence to Missoula*

Item	Quantity	Units	Cost/Unit #	Cost
1. Pl. Mix Bit. Surf.	11633	Tons	$ 26.28	$ 305,702
2. Asphalt Cement	698	Tons	$ 430.00	$ 299,925
3. Cr. Agg. Crse.	20520	C.Y.	$ 17.32	$ 355,406
4. Embankment in Place	56250	C.Y.	$ 7.41	$ 416,813
5. Drainage	1	L.S.	$ 23,000.00	$ 23,000
6. Signage & Misc.**	1	L.S.	$ 68,000.00	$ 68,000
Subtotal				$ 1,468,846
Mobilization (15%)				$ 220,327
Subtotal				$ 1,689,173
Contingency (10%)				$ 168,917
Subtotal				$ 1,858,090
Construction Engineering (10%)				$ 185,809
Design Engineering (10%)				$ 185,809
Right-of-Way				$ -
Total Estimated Cost				$ 2,229,708

* Assume 10' wide path - 1 1/2" pl. mix plus 4" gravel section

Unit costs derived from MDT English Average Bid Prices - 2007

** Misc. items include survey, erosion control, etc.

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Super Two Configuration with Roundabouts - 2 lanes**

Item	Quantity	Units	Cost/Unit #	Cost
1. Cover - Existing Road	650000	S.Y.	$ 0.55	357,500
2. Striping - Existing Road	1	L.S.	$ 70,000.00	70,000
3. Embankment in Pl.	2000	C.Y.	$ 7.41	14,820
4. Pl. Mix Bit Surf.	6575	Tons	$ 26.28	172,791
5. Asphalt	390	Tons	$ 337.87	131,769
6. Cr. Agg. Crse.	18625	C.Y.	$ 17.32	322,585
7. Curb & Gutter	3000	L.F.	$ 15.28	45,840
8. Drainage	1	L.S.	$ 20,000.00	20,000
9. Vegetation	1	L.S.	$ 15,000.00	15,000
10. Fencing & Misc.##	1	L.S.	$ 500,000.00	500,000
Subtotal				1,650,305
Traffic Control (15%)				247,546
Subtotal				1,897,851
Mobilization (10%)				189,785
Subtotal				2,087,636
Contingency (15%)				313,145
Subtotal				2,400,782
Construction Engineering (10%)				240,078
Design Engineering (20%)				480,156
Right-of-Way				-
Total Estimated Cost				3,121,016

Unit costs based on MDT English Average Bid Prices - 2007, 2006, 2005
* Costs do not include lighting
** 5 Roudabouts - assume roundabouts will require full reconstruction with 135' ∅ circle, 5" Pl. Mix, 24" CAC
Misc. items include survey, erosion control, mail boxes, cattle guards, etc.

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Two HOV Lanes within Existing Lane Structure from Lolo to Missoula

Item	Quantity	Units	Cost/Unit #	Cost
1. Signing/Striping	1	L.S.	$ 30,000.00	30,000
Subtotal				30,000
Traffic Control (15%)				4,500
Subtotal				34,500
Mobilization (10%)				3,450
Subtotal				37,950
Contingency (15%)				5,693
Subtotal				43,643
Construction Engineering (10%)				4,364
Design Engineering (20%)				8,729
Right-of-Way				-
Total Estimated Cost				56,735

Unit costs based on MDT English Average Bid Prices - 2007
* Costs do not include lighting

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Center Reversible HOV Lane within Existing Lane Structure from Lolo to Missoula

Item	Quantity	Units		Cost/Unit #	Cost
1. Signing/Striping	1	L.S.	$	150,000.00	150,000
2. Concrete Barrier Rail	6340	Ea.	$	500.00	3,170,000
3. Full Interchange (3 ea.) (see separate itemized estimate for this item)	1	Ea.	$	6,623,343.00	6,623,343
Subtotal					9,943,343
Traffic Control (15%)					1,491,501
Subtotal					11,434,844
Mobilization (10%)					1,143,484
Subtotal					12,578,329
Contingency (15%)					1,886,749
Subtotal					14,465,078
Construction Engineering (10%)					1,446,508
Design Engineering (20%)					289,302
Right-of-Way (200 acres @ 5000/acre)					1,000,000
Total Estimated Cost					17,200,888

Unit costs based on MDT English Average Bid Prices - 2007
*Costs do not include lighting

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Center Reversible Travel Lane within Existing Lane Structure from Lolo to Missoula

Item	Quantity	Units		Cost/Unit #	Cost
1. Signing/Striping	1	L.S.	$	150,000.00	150,000
2. Concrete Barrier Rail	6340	Ea.	$	500.00	3,170,000
3. Full Interchange (3 ea.) (see separate itemized estimate for this item)	1	Ea.	$	6,623,343.00	6,623,343
Subtotal					9,943,343
Traffic Control (15%)					1,491,501
Subtotal					11,434,844
Mobilization (10%)					1,143,484
Subtotal					12,578,329
Contingency (15%)					1,886,749
Subtotal					14,465,078
Construction Engineering (10%)					1,446,508
Design Engineering (20%)					289,302
Right-of-Way (200 acres @ 5000/acre)					1,000,000
Total Estimated Cost					17,200,888

Unit costs based on MDT English Average Bid Prices - 2007
*Costs do not include lighting

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: HOV Lane Reversal within Existing Lane Structure

Item	Quantity	Units	Cost/Unit #	Cost
1. 10' - Concrete Barrier Rail	6336	Ea.	$ 500.00	$ 3,168,000
2. Epoxy	870	Gal.	$ 51.70	$ 44,979
3. Signage	6	L.S.	$ 10,000.00	$ 60,000
4. Gates	12	Ea.	$ 5,000.00	$ 60,000
Subtotal				$ 3,332,979
Traffic Control (L.S.)				$ 11,000
Mobilization (L.S.)				$ 3,000
Contingency (L.S.)				$ 2,000
Construction Engineering (L.S.)				$ 2,000
Design Engineering (L.S.)				$ 2,000
Right-of-Way				$ -
Total Estimated Cost				$ 3,352,979

Unit costs based on MDT English Average Bid Prices for 2005 & 2006 adjusted for inflation and Average Bid Prices for 2007

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Grade Separated Intersections - Full Interchange **

Item	Quantity	Units	Cost/Unit *	Cost
1. Pl. Mix Bit. Surf.	2655	Tons	$ 26.28	$ 69,773
2. Asphalt Cement	159	Tons	$ 337.87	$ 53,721
3. Cr. Agg. Crse.	5166	C.Y.	$ 17.32	$ 89,475
4. Embankment in Place	555300	C.Y.	$ 7.41	$ 4,114,773
5. Drainage	1	L.S.	$ 300,000.00	$ 300,000
6. Bridge Structure	9600	S.F.	$ 136.00	$ 1,305,600
7. Misc. #	1	L.S.	$ 690,000.00	$ 690,000
Subtotal				$ 6,623,343
Traffic Control (15%)				$ 993,501
Subtotal				$ 7,616,844
Mobilization (18%)				$ 1,371,032
Subtotal				$ 8,987,876
Contingency (15%)				$ 1,348,181
Subtotal				$ 10,336,058
Construction Engineering (15%)				$ 1,550,409
Design Engineering (20%)				$ 2,067,212
Right-of-Way (150 acres @ $5,000/acre)				$ 750,000
Total Estimated Cost				$ 14,703,678

- includes survey, signing, striping, fencing, revegetation, seal & cover

* - bridge structure cost from Industry Standard Estimates
- other unit costs from MDT Average Bid Prices - 2007

** - assumes simple diamond interchange with single lane ramps & side road overpass

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Frontage Road/Connecting Roadway System on both sides of Roadway over Entire Corridor except Old US 93

Item	Quantity	Units		Cost/Unit #	Cost
1. Unclassified Excavation	904800	C.Y.	$	3.52	3,184,896
2. Pl. Mix Bit Surf.-Gr. S	163947	TON	$	26.28	4,308,518
3. Asphalt Cement - PG 58-28	9821	TON	$	337.87	3,318,334
4. Cr. Agg. Crse	604901	C.Y.	$	17.32	10,476,891
5. Topsoil S&P	193333	C.Y.	$	3.51	678,600
6. Cover	2320000	S.Y.	$	0.55	1,276,000
7. Seed/Fert.	464	Acres	$	400.00	185,600
8. Signing/Striping	1	L.S.	$	483,333.33	483,333
9. Culverts/Drainage	1	L.S.	$	2,465,000.00	2,465,000
10. Fencing & Misc.**	1	L.S.	$	1,643,333.33	1,643,333
Subtotal					28,020,506
Traffic Control (15%)					4,203,076
Subtotal					32,223,582
Mobilization (10%)					3,222,358
Subtotal					35,445,940
Contingency (15%)					5,316,891
Subtotal					40,762,831
Construction Engineering (10%)					4,076,283
Design Engineering (20%)					815,257
Right-of-Way (450 acres @ 5000/acre)					2,250,000
Total Estimated Cost					47,904,371

Unit costs based on MDT English Average Bid Prices - 2007, 2006, 2005
* Costs do not include lighting
** Misc. items include survey, erosion control, mail boxes, cattle guards, etc.

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Intersection Improvements - Right Turn Lane*

Item	Quantity	Units	Cost/Unit #	Cost
1. Topsoil Stockpile & Place	450	C.Y.	$ 3.51	$ 1,580
2. Embankment in Place	4700	C.Y.	$ 7.41	$ 34,827
3. Cr. Agg. Crse	2300	C.Y.	$ 17.32	$ 39,836
4. Pl. Mix Bit Surf. - Gr. D	1550	Ton	$ 67.71	$ 104,951
5. Revegetation	5	Acre	$ 400.00	$ 2,000
6. Asphalt Cement	93	Ton	$ 432.09	$ 40,184
7. Signage/Striping	1	L.S.	$ 5,800.00	$ 5,800
8. Drainage	1	L.S.	$ 7,000.00	$ 7,000
Subtotal				$ 236,177
Traffic Control (15%)				$ 35,427
Subtotal				$ 271,604
Mobilization (10%)				$ 27,160
Subtotal				$ 298,764
Contingency (15%)				$ 44,815
Subtotal				$ 343,579
Construction Engineering (10%)				$ 34,358
Design Engineering (20%)				$ 68,716
Right-of-Way				$ -
Total Estimated Cost/Unit				$ 446,653 per turn lane

Unit costs based on MDT English Average Bid Prices - 2007
* Costs do not include lighting

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Pedestrian Signal Actuation

Item	Quantity	Units	Cost/Unit #	Cost
1. Pedestrian Push Button	1	Each	$ 400.00	$ 400
2. LED Pedestrian Signal Head	1	Each	$ 1,000.00	$ 1,000
Subtotal				$ 1,400
Traffic Control (15%)				$ 210
Subtotal				$ 1,610
Mobilization (15%)				$ 242
Subtotal				$ 1,852
Contingency (10%)				$ 185
Subtotal				$ 2,037
Construction Engineering (10%)				$ 204
Design Engineering (8%)				$ 163
Right-of-Way				$ -
Total Estimated Cost/Unit				$ 2,403 per crossing*

Unit costs based on MDT English Average Bid Prices - 2006/2007
*Estimate does not include cost for amount of wire at each intersection.

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Improved Ped. Crossings at Bus Stops & Park & Ride Locations

Item	Quantity	Units	Cost/Unit *	Cost
1. Bridge Deck - Pedestrian	7200	FT^2	$ 100.00	$ 720,000
2. Abutments	2	Ea.	$ 18,000.00	$ 36,000
3. ADA Approach Path #	1	L.S.	$ 40,000.00	$ 40,000
4. Landscaping	1	L.S.	$ 4,000.00	$ 4,000
5. Signing/Lighting	1	L.S.	$ 20,000.00	$ 20,000
6. Bridge Railing/Fence	200	L.F.	$ 85.00	$ 17,000
Subtotal				$ 837,000
Mobilization (15%)				$ 126,000
Subtotal				$ 963,000
Contingency (25%)				$ 241,000
Subtotal				$ 1,204,000
Construction Engineering (15%)				$ 181,000
Design Engineering (10%)				$ 120,000
Right-of-Way				$ -
Total Estimated Cost				$ 1,505,000

includes embankment, CBC, Pl.Mix Path

* cost data from website www.bicyclinginfo.org/bikecost sponsored by NCHRP and others

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Animal Crossing Treatments - 4'x8' RCB, 3 each

Item	Quantity	Units	Cost/Unit #	Cost
1. 4'x8' RCB	258	L.F.	$ 700.00	$ 180,600
Subtotal				$ 180,600
Traffic Control (10%)				$ 18,060
Subtotal				$ 198,660
Mobilization (15%)				$ 29,799
Subtotal				$ 228,459
Contingency (10%)				$ 22,846
Subtotal				$ 251,305
Construction Engineering (10%)				$ 25,130
Design Engineering (8%)				$ 20,104
Right-of-Way				$ -
Total Estimated Cost				$ 296,540

Unit costs based on MDT English Average Bid Prices - 2006

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Animal Crossing Treatments - 12'x22' RCB, 3 each

Item	Quantity	Units	Cost/Unit #	Cost
1. 12'x22' RCB	252	L.F.	$ 1,700.00	$ 428,400
Subtotal				$ 428,400
Traffic Control (10%)				$ 42,840
Subtotal				$ 471,240
Mobilization (15%)				$ 70,686
Subtotal				$ 541,926
Contingency (10%)				$ 54,193
Subtotal				$ 596,119
Construction Engineering (10%)				$ 59,612
Design Engineering (8%)				$ 47,689
Right-of-Way				$ -
Total Estimated Cost				$ 703,420

Unit costs based on MDT English Average Bid Prices - 2006/2007

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Transportation Communication System

Item	Quantity	Units	Cost/Unit #	Cost
1. Message Sign	1	E.A.	$ 98,000.00	$ 98,000
2. Structure	1	E.A.	$ 98,000.00	$ 98,000
Subtotal				$ 196,000
Traffic Control (10%)				$ 19,600
Subtotal				$ 215,600
Mobilization (15%)				$ 32,340
Subtotal				$ 247,940
Contingency (10%)				$ 24,794
Subtotal				$ 272,734
Construction Engineering (10%)				$ 27,273
Design Engineering (8%)				$ 21,819
Right-of-Way				$ -
Total Estimated Cost/Unit				$ 321,826 per sign

Unit costs based discussions with Dektronics Variable Message Signs (206)-898-5381

U.S. 93 CORRIDOR STUDY
Planning Level Alternatives Costing

Improvement Option: Improved Pullout Locations - 2 Each

Item	Quantity	Units	Cost/Unit #	Cost
1. Embankment in Place	8000	C.Y.	$ 7.41	$ 59,280
2. Cr. Agg. Course	3150	C.Y.	$ 17.32	$ 54,558
3. Pl. Mix Bit. Surf. - Gr. D	248	Ton	$ 75.00	$ 18,600
4. Asphalt Cement	15.2	Ton	$ 430.00	$ 6,536
5. Drainage	1	L.S.	$ 16,000.00	$ 16,000
6. Signing/Markings	1	L.S.	$ 6,000.00	$ 6,000
7. Fencing	1	L.S.	$ 4,000.00	$ 4,000
Subtotal				$ 164,974
Traffic Control (15%)				$ 24,746
Subtotal				$ 189,720
Mobilization (15%)				$ 28,458
Subtotal				$ 218,178
Contingency (15%)				$ 32,727
Subtotal				$ 250,905
Construction Engineering (10%)				$ 25,090
Design Engineering (10%)				$ 25,090
Right-of-Way				$ -
Total Estimated Cost				$ 301,086

Unit costs based on MDT English Average Bid Prices - 2007

US 93 Corridor Study
Cost Summary

	Enhanced Vanpool / Rideshare Programs		Improved Park & Ride Locations	Separated Bike / Pedestrian Path		Fixed Route Bus Service		Intersection Improvements: Additional Right Turn Lane	Improved Pedestrian Crossings		Improved Animal Crossings		Transportation Communication System	Improved Pullout Locations
2007 Estimated Const. Cost	**$ 5,000**	**$ 40,000**	**$ 150,000**	**$ 1,400,000**	**$ 2,200,000**	**$ 400,000**	**$ 8,000,000**	**$ 450,000**	**$ 2,500**	**$ 1,505,000**	**$ 300,000**	**$ 2,000,000**	**$ 350,000**	**$ 300,000**
Indirect Costs (@12%)	$ 600	$ 4,800	$ 18,000	$ 168,000	$ 264,000	$ 48,000	$ 960,000	$ 54,000	$ 300	$ 180,600	$ 36,000	$ 240,000	$ 42,000	$ 36,000
Year 2007 Estimate	**$ 5,600**	**$ 44,800**	**$ 168,000**	**$ 1,568,000**	**$ 2,464,000**	**$ 448,000**	**$ 8,960,000**	**$ 504,000**	**$ 2,800**	**$ 1,685,600**	**$ 336,000**	**$ 2,240,000**	**$ 392,000**	**$ 336,000**
Inflation at 3% Annually to Year 2012	$ 5,796	$ 46,371	$ 173,891	$ 1,622,984	$ 2,550,403	$ 463,710	$ 9,274,193	$ 521,673	$ 2,898	$ 1,744,707	$ 347,782	$ 2,318,548	$ 405,746	$ 347,782
Indirect Costs (@12%)	$ 696	$ 5,565	$ 20,867	$ 194,758	$ 306,048	$ 55,645	$ 1,112,903	$ 62,601	$ 348	$ 209,365	$ 41,734	$ 278,226	$ 48,690	$ 41,734
Year 2012 Estimate	**$ 6,492**	**$ 51,936**	**$ 194,758**	**$ 1,817,742**	**$ 2,856,451**	**$ 519,355**	**$ 10,387,096**	**$ 584,274**	**$ 3,246**	**$ 1,954,072**	**$ 389,516**	**$ 2,596,774**	**$ 454,436**	**$ 389,516**
Inflation at 3% Annually to Year 2018	$ 6,921	$ 55,369	$ 207,635	$ 1,937,927	$ 3,045,315	$ 553,694	$ 11,073,871	$ 622,905	$ 3,461	$ 2,083,272	$ 415,270	$ 2,768,468	$ 484,482	$ 415,270
Indirect Costs (@12%)	$ 831	$ 6,644	$ 24,916	$ 232,551	$ 365,438	$ 66,443	$ 1,328,865	$ 74,749	$ 415	$ 249,993	$ 49,832	$ 332,216	$ 58,138	$ 49,832
Year 2018 Estimate	**$ 7,752**	**$ 62,013**	**$ 232,551**	**$ 2,170,478**	**$ 3,410,753**	**$ 620,137**	**$ 12,402,736**	**$ 697,654**	**$ 3,876**	**$ 2,333,265**	**$ 465,102**	**$ 3,100,684**	**$ 542,620**	**$ 465,102**
Inflation at 3% Annually to Year 2024	$ 8,264	$ 66,114	$ 247,927	$ 2,313,987	$ 3,636,265	$ 661,139	$ 13,222,781	$ 743,781	$ 4,132	$ 2,487,536	$ 495,854	$ 3,305,695	$ 578,497	$ 495,854
Indirect Costs (@12%)	$ 992	$ 7,934	$ 29,751	$ 277,678	$ 436,352	$ 79,337	$ 1,586,734	$ 89,254	$ 496	$ 298,504	$ 59,503	$ 396,683	$ 69,420	$ 59,503
Year 2024 Estimate	**$ 9,256**	**$ 74,048**	**$ 277,678**	**$ 2,591,665**	**$ 4,072,617**	**$ 740,476**	**$ 14,809,515**	**$ 833,035**	**$ 4,628**	**$ 2,786,040**	**$ 555,357**	**$ 3,702,378**	**$ 647,917**	**$ 555,357**
Inflation at 3% Annually to Year 2030	$ 9,868	$ 78,943	$ 296,038	$ 2,763,021	$ 4,341,890	$ 789,435	$ 15,788,692	$ 888,114	$ 4,934	$ 2,970,248	$ 592,076	$ 3,947,173	$ 690,755	$ 592,076
Indirect Costs (@12%)	$ 1,184	$ 9,473	$ 35,525	$ 331,563	$ 521,027	$ 94,732	$ 1,894,643	$ 106,574	$ 592	$ 356,430	$ 71,049	$ 473,661	$ 82,891	$ 71,049
Year 2030 Estimate	**$ 11,052**	**$ 88,416**	**$ 331,563**	**$ 3,094,584**	**$ 4,862,917**	**$ 884,167**	**$ 17,683,335**	**$ 994,688**	**$ 5,526**	**$ 3,326,678**	**$ 663,125**	**$ 4,420,834**	**$ 773,646**	**$ 663,125**